Search history

Nwaonicha 10/517231 07/06/2006

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=> d his full

     (FILE 'HOME' ENTERED AT 08:48:07 ON 06 JUL 2006)

     FILE 'STNGUIDE' ENTERED AT 08:48:20 ON 06 JUL 2006

     FILE 'HCAPLUS' ENTERED AT 08:49:50 ON 06 JUL 2006
L1             1 SEA ABB=ON  PLU=ON  US2004-517231/APPS
                 D SCA
                 SEL RN

     FILE 'REGISTRY' ENTERED AT 08:50:22 ON 06 JUL 2006
L2            24 SEA ABB=ON  PLU=ON  (109-65-9/BI OR 109-72-8/BI OR 117421-97-3/
                 BI OR 135991-03-6/BI OR 159968-28-2/BI OR 219997-22-5/BI OR
                 352706-49-1/BI OR 352706-50-4/BI OR 37686-18-3/BI OR 4023-52-3/
                 BI OR 42978-66-5/BI OR 51728-26-8/BI OR 52408-84-1/BI OR
                 618-32-6/BI OR 634600-42-3/BI OR 634600-43-4/BI OR 634600-44-5/
                 BI OR 634600-45-6/BI OR 634600-46-7/BI OR 634600-47-8/BI OR
                 638-21-1/BI OR 88-95-9/BI OR 938-18-1/BI OR 97949-13-8/BI)
                 D SCA

     FILE 'STNGUIDE' ENTERED AT 08:51:01 ON 06 JUL 2006

     FILE 'REGISTRY' ENTERED AT 09:17:37 ON 06 JUL 2006
L3               STRUCTURE UPLOADED
L4             0 SEA SSS SAM L3

     FILE 'STNGUIDE' ENTERED AT 09:18:26 ON 06 JUL 2006

     FILE 'REGISTRY' ENTERED AT 09:19:50 ON 06 JUL 2006
L5               STRUCTURE UPLOADED
L6             0 SEA SSS SAM L5

     FILE 'STNGUIDE' ENTERED AT 09:20:37 ON 06 JUL 2006

     FILE 'REGISTRY' ENTERED AT 09:21:35 ON 06 JUL 2006
L7               STRUCTURE UPLOADED
L8            29 SEA SSS SAM L7
L9               STRUCTURE UPLOADED
L10           16 SEA SSS SAM L9
                 D SCA
                 D STAT QUE L10
L11          274 SEA SSS FUL L9
                 SAVE TEMP L11 NWA231STRD/A

     FILE 'HCAPLUS' ENTERED AT 09:32:45 ON 06 JUL 2006
L12          111 SEA ABB=ON  PLU=ON  L11

     FILE 'REGISTRY' ENTERED AT 09:32:52 ON 06 JUL 2006
L13            0 SEA SUB=L11 SSS SAM L3
L14            7 SEA SUB=L11 SSS FUL L3
                 D SCA

     FILE 'HCAPLUS' ENTERED AT 09:35:30 ON 06 JUL 2006

     FILE 'REGISTRY' ENTERED AT 09:35:45 ON 06 JUL 2006
                 SAVE TEMP L14 NWA231STRA/A

     FILE 'HCAPLUS' ENTERED AT 09:36:25 ON 06 JUL 2006
L15            3 SEA ABB=ON  PLU=ON  L14
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     FILE 'CASREACT' ENTERED AT 09:37:19 ON 06 JUL 2006
L16           0 SEA ABB=ON  PLU=ON  L14/PRO

     FILE 'HCAPLUS' ENTERED AT 09:38:15 ON 06 JUL 2006
L17           3 SEA ABB=ON  PLU=ON  L12 AND L15
                D SCA

     FILE 'STNGUIDE' ENTERED AT 09:39:18 ON 06 JUL 2006

     FILE 'BEILSTEIN' ENTERED AT 09:48:39 ON 06 JUL 2006
L18           0 SEA SSS SAM L3
L19           0 SEA SSS FUL L3

     FILE 'BEILSTEIN' ENTERED AT 09:49:12 ON 06 JUL 2006
                D STAT QUE L19
                D L3

     FILE 'REGISTRY' ENTERED AT 09:53:35 ON 06 JUL 2006
L20           0 SEA SUB=L11 SSS SAM L5
L21           9 SEA SUB=L11 SSS FUL L5
                SAVE TEMP NWA231STRB/A L21
L22           2 SEA ABB=ON  PLU=ON  L21 NOT L14
                D SCA

     FILE 'HCAPLUS' ENTERED AT 09:56:07 ON 06 JUL 2006
L23           1 SEA ABB=ON  PLU=ON  L22
L24           1 SEA ABB=ON  PLU=ON  L23 AND L12
                D SCA
L25           4 SEA ABB=ON  PLU=ON  L21
L26           4 SEA ABB=ON  PLU=ON  L25 AND L12

     FILE 'BEILSTEIN' ENTERED AT 09:58:44 ON 06 JUL 2006
L27           0 SEA SSS SAM L5
L28           0 SEA SSS FUL L5

     FILE 'BEILSTEIN' ENTERED AT 09:59:06 ON 06 JUL 2006
                D STAT QUE L28

     FILE 'HCAPLUS' ENTERED AT 10:03:48 ON 06 JUL 2006
                SEL RN L26

     FILE 'REGISTRY' ENTERED AT 10:04:05 ON 06 JUL 2006
L29         162 SEA ABB=ON  PLU=ON  (938-18-1/BI OR 109-65-9/BI OR 159968-28-2/
                BI OR 1989-53-3/BI OR 352706-49-1/BI OR 352706-50-4/BI OR
                88-95-9/BI OR 106-94-5/BI OR 106-95-6/BI OR 108-23-6/BI OR
                109-72-8/BI OR 109227-12-5/BI OR 117421-97-3/BI OR 1237-53-2/BI
                 OR 135991-03-6/BI OR 14602-86-9/BI OR 16331-52-5/BI OR
                171056-53-4/BI OR 171056-54-5/BI OR 171056-55-6/BI OR 171056-56
                -7/BI OR 171056-57-8/BI OR 171056-58-9/BI OR 171056-59-0/BI OR
                17201-83-1/BI OR 17341-93-4/BI OR 1871-76-7/BI OR 1885-14-9/BI
                OR 18908-66-2/BI OR 20412-38-8/BI OR 2094-72-6/BI OR 219997-22-
                5/BI OR 23288-61-1/BI OR 24468-13-1/BI OR 24625-82-9/BI OR
                25629-50-9/BI OR 28920-43-6/BI OR 2937-50-0/BI OR 305813-37-0/B
                I OR 312-94-7/BI OR 3229-00-3/BI OR 3282-30-2/BI OR 3395-91-3/B
                I OR 34914-36-8/BI OR 352706-33-3/BI OR 352706-34-4/BI OR
                352706-35-5/BI OR 352706-36-6/BI OR 352706-37-7/BI OR 352706-38
                -8/BI OR 352706-39-9/BI OR 352706-40-2/BI OR 352706-41-3/BI OR
                352706-42-4/BI OR 352706-43-5/BI OR 352706-44-6/BI OR 352706-45
                -7/BI OR 352706-46-8/BI OR 352706-47-9/BI OR 352706-48-0/BI OR
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                352706-51-5/BI OR 352706-52-6/BI OR 352706-53-7/BI OR 352706-54
                -8/BI OR 352706-55-9/BI OR 352706-56-0/BI OR 352706-57-1/BI OR
                352706-58-2/BI OR 352706-59-3/BI OR 352706-60-6/BI OR 352706-61
                -7/BI OR 352706-62-8/BI OR 352706-63-9/BI OR 352706-64-0/BI OR
                352706-65-1/BI OR 352706-66-2/BI OR 352706-67-3/BI OR 352706-68
                -4/BI OR 352706-69-5/BI OR 352706-70-8/BI OR 352706-71-9/BI OR
                352706-72-0/BI OR 352706-73-1/BI OR 352706-74-2/BI OR 352706-75
                -3/BI OR 352706-76-4/BI OR 352706-77-5/BI OR 352706-78-6/BI OR
                352706-79-7/BI OR 352706-80-0/BI OR 352706-81-1/BI OR 352706-82
                -2/BI OR 352706-83-3/BI OR 352706-84-4/BI OR 352706-85-5/BI OR
                352706-86-6/BI OR 352706-87-7/BI OR 352706-88-8/BI OR 352706-89
                -9/BI OR 352706-90-2/BI OR 352706-91-3/BI OR 352706-92-4/BI OR
                3527
L30           78 SEA ABB=ON  PLU=ON  L29 AND X>0
L31            5 SEA ABB=ON  PLU=ON  L29 AND PMS/CI
                D SCA

     FILE 'HCAPLUS' ENTERED AT 10:06:01 ON 06 JUL 2006
L32          365 SEA ABB=ON  PLU=ON  L31
L33            1 SEA ABB=ON  PLU=ON  L26 AND L32
                D SCA

     FILE 'REGISTRY' ENTERED AT 10:07:25 ON 06 JUL 2006
L34            4 SEA ABB=ON  PLU=ON  L29 AND A1/PG
                D SCA

     FILE 'HCAPLUS' ENTERED AT 10:09:22 ON 06 JUL 2006
L35        10272 SEA ABB=ON  PLU=ON  L34
L36            2 SEA ABB=ON  PLU=ON  L35 AND L26
                D SCA

     FILE 'STNGUIDE' ENTERED AT 10:10:47 ON 06 JUL 2006

     FILE 'REGISTRY' ENTERED AT 10:11:15 ON 06 JUL 2006
L37           31 SEA ABB=ON  PLU=ON  L29 AND X>1

     FILE 'HCAPLUS' ENTERED AT 10:11:28 ON 06 JUL 2006
L38         5398 SEA ABB=ON  PLU=ON  L37
L39            3 SEA ABB=ON  PLU=ON  L26 AND L38
                D SCA
                D COST

     FILE 'STNGUIDE' ENTERED AT 10:13:36 ON 06 JUL 2006

     FILE 'MARPAT' ENTERED AT 10:14:31 ON 06 JUL 2006
L40            1 SEA SSS SAM L5
                D SCA
L41           25 SEA SSS FUL L5
L42           23 SEA ABB=ON  PLU=ON  L41/COM
L43            1 SEA SUB=L41 SSS SAM L3
                D SCA
L44           18 SEA SUB=L41 SSS FUL L3
L45           18 SEA ABB=ON  PLU=ON  L44/COM

     FILE 'STNGUIDE' ENTERED AT 10:23:09 ON 06 JUL 2006

     FILE 'MARPAT' ENTERED AT 10:24:05 ON 06 JUL 2006
L46                STRUCTURE UPLOADED
L47            0 SEA SUB=L41 SSS SAM L46
L48            4 SEA SUB=L41 SSS FUL L46
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     FILE 'HCAPLUS' ENTERED AT 10:26:38 ON 06 JUL 2006
L49         1596 SEA ABB=ON  PLU=ON  WOLF J?/AU
L50          228 SEA ABB=ON  PLU=ON  HUG G?/AU
L51            6 SEA ABB=ON  PLU=ON  L49 AND L50

     FILE 'WPIX' ENTERED AT 10:27:39 ON 06 JUL 2006
L52            0 SEA SSS SAM L3
L53            4 SEA SSS FUL L3
                 SEL SDCN
L54            0 SEA ABB=ON  PLU=ON  (RACO5E/DCR OR RACO5O/DCR OR RA552Z/DCR OR
                 RA5530/DCR)
L55            0 SEA ABB=ON  PLU=ON  (RACO5E/SDRN OR RACO5O/SDRN OR RA552Z/SDRN
                 OR RA5530/SDRN)
L56            2 SEA ABB=ON  PLU=ON  (RACO5E/DCN OR RACO5O/DCN OR RA552Z/DCN OR
                 RA5530/DCN)
                 D SCA
                 SEL DCSE L53
L57            2 SEA ABB=ON  PLU=ON  (448417-0-0-0/DCRE OR 448418-0-0-0/DCRE OR
                 825356-0-0-0/DCRE OR 825366-0-0-0/DCRE)
                 D SCA

     FILE 'STNGUIDE' ENTERED AT 10:34:19 ON 06 JUL 2006

     FILE 'WPIX' ENTERED AT 10:34:28 ON 06 JUL 2006
L58          717 SEA ABB=ON  PLU=ON  WOLF J?/AU
L59           17 SEA ABB=ON  PLU=ON  HUG G?/AU
L60            6 SEA ABB=ON  PLU=ON  L58 AND L59

     FILE 'STNGUIDE' ENTERED AT 10:34:56 ON 06 JUL 2006

     FILE 'HCAPLUS' ENTERED AT 10:35:28 ON 06 JUL 2006
               D QUE L51

     FILE 'WPIX' ENTERED AT 10:35:41 ON 06 JUL 2006
               D QUE L60

     FILE 'HCAPLUS, WPIX' ENTERED AT 10:36:01 ON 06 JUL 2006
L61            7 DUP REM L51 L60 (5 DUPLICATES REMOVED)
                      ANSWERS '1-6' FROM FILE HCAPLUS
                      ANSWER '7' FROM FILE WPIX
                 D IBIB ABS L61 1-6
                 D IALL L61 7

     FILE 'STNGUIDE' ENTERED AT 10:37:17 ON 06 JUL 2006

     FILE 'REGISTRY' ENTERED AT 10:38:39 ON 06 JUL 2006

     FILE 'HCAPLUS' ENTERED AT 10:38:46 ON 06 JUL 2006
               D STAT QUE L26
               D STAT QUE L33
               D STAT QUE L36
               D STAT QUE L39
L62            4 SEA ABB=ON  PLU=ON  L26 OR L33 OR L36 OR L39

     FILE 'CASREACT' ENTERED AT 10:40:19 ON 06 JUL 2006
               D STAT QUE L16

     FILE 'BEILSTEIN' ENTERED AT 10:40:43 ON 06 JUL 2006
               D STAT QUE L28
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     FILE 'MARPAT' ENTERED AT 10:41:00 ON 06 JUL 2006
                D STAT QUE L48

     FILE 'HCAPLUS, MARPAT' ENTERED AT 10:41:37 ON 06 JUL 2006
L63             6 DUP REM L62 L48 (2 DUPLICATES REMOVED)
                      ANSWERS '1-4' FROM FILE HCAPLUS
                      ANSWERS '5-6' FROM FILE MARPAT
                D IBIB ABS HITIND HITSTR L63 1-4
                D IBIB ABS HIT L63 5-6

     FILE 'WPIX' ENTERED AT 10:43:01 ON 06 JUL 2006
                D STAT QUE L56
                D STAT QUE L57
L64             2 SEA ABB=ON  PLU=ON  L56 OR L57

     FILE 'HCAPLUS, MARPAT, WPIX' ENTERED AT 10:44:08 ON 06 JUL 2006
L65             6 DUP REM L62 L48 L64 (4 DUPLICATES REMOVED)
                      ANSWERS '1-4' FROM FILE HCAPLUS
                      ANSWERS '5-6' FROM FILE MARPAT
L66             0 SEA ABB=ON  PLU=ON  L63 NOT L65


     FILE HOME

     FILE STNGUIDE
     FILE CONTAINS CURRENT INFORMATION.
     LAST RELOADED: Jun 30, 2006 (20060630/UP).

     FILE HCAPLUS

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     FILE COVERS 1907 - 6 Jul 2006  VOL 145 ISS 2
     FILE LAST UPDATED: 5 Jul 2006  (20060705/ED)

     New CAS Information Use Policies, enter HELP USAGETERMS for details.

      This file contains CAS Registry Numbers for easy and accurate
      substance identification.

     FILE REGISTRY
     Property values tagged with IC are from the ZIC/VINITI data file
     provided by InfoChem.

     STRUCTURE FILE UPDATES:    5 JUL 2006  HIGHEST RN 890705-10-9
     DICTIONARY FILE UPDATES:   5 JUL 2006  HIGHEST RN 890705-10-9

     New CAS Information Use Policies, enter HELP USAGETERMS for details.

     TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006
```

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

FILE CASREACT

FILE CONTENT:1840 - 2 Jul 2006 VOL 145 ISS 1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

****
* *
* CASREACT now has more than 10 million reactions *
* *
****

Some CASREACT records are derived from the ZIC/VINITI database (1974-1991) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BEILSTEIN
FILE LAST UPDATED ON JUNE 16, 2006

FILE COVERS 1771 TO 2006.
FILE CONTAINS 9,606,495 SUBSTANCES

>>>PLEASE NOTE: Reaction Data and substance data are stored in separate documents and can not be searched together in one query. Reaction data for BEILSTEIN compounds may be displayed immediately with the display codes PRE (preparations) and REA (reactions). A substance answer set retrieved after the search for a chemical name, a compounds with available reaction information by combining with PRE/FA, REA/FA or more generally with RX/FA. The BEILSTEIN Registry Number (BRN) is the link between a BEILSTEIN compound and belonging reactions. For mo detailed reaction searches BRNs can be searched as reaction partner BRNs Reactant BRN (RX.RBRN) or Product BRN (RX.PBRN).<<<

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE <<<

****
* PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST. *
* SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE *
* ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE *
* ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS. *
* FOR PRICE INFORMATION SEE HELP COST *
****

NEW
* PATENT NUMBERS (PN) AND BABS ACCESSION NUMBERS (BABSAN) CAN NOW BE SEARCHED, SELECTED AND TRANSFERRED.
* NEW DISPLAY FORMATS ALLREF, ALLP AND BABSAN SHOW ALL REFERENCES, ALL PATENT REFERENCES, OR ALL BABS ACCESSION NUMBERS FOR A COMPOUND AT A GLANCE.

FILE MARPAT
FILE CONTENT: 1961-PRESENT VOL 145 ISS 1 (20060630/ED)

SOME MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 2006094872 04 MAY 2006
DE 102004050353 20 APR 2006
EP 1647549 19 APR 2006
JP 2006108158 20 APR 2006
WO 2006053912 26 MAY 2006
GB 2419093 19 APR 2006
FR 2876691 21 APR 2006
RU 2273632 10 APR 2006
CA 2518664 10 MAR 2006

Expanded G-group definition display now available.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

FILE WPIX
FILE LAST UPDATED: 3 JUL 2006 <20060703/UP>
MOST RECENT DERWENT UPDATE: 200642 <200642/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf <

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
http://scientific.thomson.com/support/patents/coverage/latestupdates/

>>> PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE
http://www.stn-international.de/stndatabases/details/ipc_reform.html and
http://scientific.thomson.com/media/scpdf/ipcrdwpi.pdf <<<

>>> FOR FURTHER DETAILS ON THE FORTHCOMING DERWENT WORLD PATENTS INDEX ENHANCEMENTS PLEASE VISIT:
http://www.stn-international.de/stndatabases/details/dwpi_r.html <<<

=>

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=> file hcaplus
FILE 'HCAPLUS' ENTERED AT 10:35:28 ON 06 JUL 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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AUTHOR SEARCH

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FILE COVERS 1907 - 6 Jul 2006  VOL 145 ISS 2
FILE LAST UPDATED: 5 Jul 2006  (20060705/ED)

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 This file contains CAS Registry Numbers for easy and accurate
 substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d que L51
L49         1596 SEA FILE=HCAPLUS ABB=ON  PLU=ON  WOLF J?/AU
L50          228 SEA FILE=HCAPLUS ABB=ON  PLU=ON  HUG G?/AU
L51            6 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L49 AND L50


=> file wpix
FILE 'WPIX' ENTERED AT 10:35:41 ON 06 JUL 2006
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FILE LAST UPDATED:          3 JUL 2006      <20060703/UP>
MOST RECENT DERWENT UPDATE:     200642        <200642/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
    PLEASE VISIT:
 http://www.stn-international.de/training_center/patents/stn_guide.pdf <

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
http://scientific.thomson.com/support/patents/coverage/latestupdates/

>>> PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE
http://www.stn-international.de/stndatabases/details/ipc_reform.html and
http://scientific.thomson.com/media/scpdf/ipcrdwpi.pdf <<<

>>> FOR FURTHER DETAILS ON THE FORTHCOMING DERWENT WORLD PATENTS
    INDEX ENHANCEMENTS PLEASE VISIT:
http://www.stn-international.de/stndatabases/details/dwpi_r.html <<<
'BIX' IS DEFAULT SEARCH FIELD FOR 'WPIX' FILE

=> d que L60
L58          717 SEA FILE=WPIX ABB=ON  PLU=ON  WOLF J?/AU
L59           17 SEA FILE=WPIX ABB=ON  PLU=ON  HUG G?/AU
L60            6 SEA FILE=WPIX ABB=ON  PLU=ON  L58 AND L59
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```
=> dup rem L51 L60
FILE 'HCAPLUS' ENTERED AT 10:36:01 ON 06 JUL 2006
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FILE 'WPIX' ENTERED AT 10:36:01 ON 06 JUL 2006
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PROCESSING COMPLETED FOR L51
PROCESSING COMPLETED FOR L60
L61            7 DUP REM L51 L60 (5 DUPLICATES REMOVED)
                 ANSWERS '1-6' FROM FILE HCAPLUS
                 ANSWER '7' FROM FILE WPIX

=> d ibib abs L61 1-6; d iall L61 7

L61  ANSWER 1 OF 7  HCAPLUS  COPYRIGHT 2006 ACS on STN DUPLICATE 1
ACCESSION NUMBER:         2003:991523  HCAPLUS
DOCUMENT NUMBER:          140:28640
TITLE:                    Multimer forms of monoacylphosphine oxides and
                          bisacylphosphine oxides
INVENTOR(S):              Wolf, Jean-Pierre; Hug, Gebhard
PATENT ASSIGNEE(S):       Ciba Specialty Chemicals Holding Inc., Switz.
SOURCE:                   PCT Int. Appl., 37 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
     ---------------      ----   --------    --------------------     --------
     WO 2003104245         A1    20031218    WO 2003-EP5801           20030603
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2489246            AA    20031218    CA 2003-2489246          20030603
     AU 2003274653         A1    20031222    AU 2003-274653           20030603
     EP 1511754            A1    20050309    EP 2003-740176           20030603
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     BR 2003012133         A     20050405    BR 2003-12133            20030603
     CN 1659175            A     20050824    CN 2003-813477           20030603
     JP 2005529167         T2    20050929    JP 2004-511314           20030603
     US 2005245768         A1    20051103    US 2004-517231           20041207
PRIORITY APPLN. INFO.:                       EP 2002-405473       A   20020611
                                             WO 2003-EP5801       W   20030603

OTHER SOURCE(S):          MARPAT 140:28640
AB   The invention relates to dimer and multimer forms of bisacylphosphine
     oxides (BAPO) compds. of the formula [R2COPO(R1)]nQ[COPO(R1)COR2]m and
     dimer and multimer forms of monoacylphosphine oxides (MAPO) compds. of the
```

formula [R1PO(R3)CO]nQ[COPO(R3)R1]m: wherein R1, R2, and R3 independently of one another are unsubstituted or substituted C1-C12 alkyl, benzyl, C1-C12 alkoxy, C3-C6 cycloalkyl or C5-C14 aryl; Q is a di-tri or tetravalent arylene residue; n is 1-4, m is 0-2, n + m is 2, 3 or 4, with the proviso, that R1 and R3 are different from each other. Thus, [phenyl(2,4,6-trimethylbenzoyl)phosphinoyl]{2,4,6-trimethyl-3-[phenyl(2,4,6-trimethylbenzoyl)phosphinoanecarbonyl]phenyl}methanone was synthesized and used as a photoinitiator for UV-curable coatings.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2003:417756 HCAPLUS
DOCUMENT NUMBER: 139:8199
TITLE: Multimer forms of acylphosphines and their oxide or sulfide derivatives, preparation, and photoinitiator use
INVENTOR(S): **Wolf, Jean-Pierre; Hug, Gebhard**
PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.
SOURCE: PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003044030	A1	20030530	WO 2002-EP12680	20021113
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2467576	AA	20030530	CA 2002-2467576	20021113
AU 2002366198	A1	20030610	AU 2002-366198	20021113
EP 1446410	A1	20040818	EP 2002-790367	20021113
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002014324	A	20041103	BR 2002-14324	20021113
CN 1589276	A	20050302	CN 2002-822914	20021113
JP 2005509685	T2	20050414	JP 2003-545667	20021113
US 2005004247	A1	20050106	US 2004-495958	20040517
PRIORITY APPLN. INFO.:			EP 2001-811113 A	20011120
			WO 2002-EP12680 W	20021113

OTHER SOURCE(S): MARPAT 139:8199
AB The title compds. have the formula ACO(R)P:Ex(W)nL, where E = O or S; and x = 0 or 1, A = cyclopentyl, cyclohexyl, naphthyl, biphenylyl, anthracyl or O, S or N containing 5- or 6- membered heterocyclic ring, where the radicals are unsubstituted or substituted by halogen, C1-4-alkyl or C1-C4alkoxy; or A = R1-5C6, R = C1-24-alkyl, unsubstituted or substituted, C2-24-alkyl which is interrupted once or more than once by nonconsecutive O, S or NR14 and which is unsubstituted or substituted, C2-C24alkenyl which is uninterrupted or interrupted once or more than once by nonconsecutive O, S or NR14 and which is unsubstituted or substituted,

C5-C24cycloalkenyl which is uninterrupted or interrupted once or more than once by nonconsecutive O, S or NR14 and which is unsubstituted or substituted; C7-C24arylalkyl which is unsubstituted or substituted on the aryl group, C4-C24cycloalkyl which is uninterrupted or interrupted once or more than once by O, S or NR14 and which is unsubstituted or substituted, C8-C24arylcycloalkyl or C8-C24arylcycloalkenyl; or; W = bond, COO or CON(R15); L is a di-tri-or tetravalent linking group; n = 2,3 or 4; R11-15 = hydrocarbyl. A UV-curable white coating contained Ebecryl 830 67.5, hexanediol diacrylate 5.0, trimethylolpropane triacrylate 2.5, TiO2 25.0, and photoinitiator (reaction product of 2,6-bis(bromomethyl)pyridine and Li (2,4,6-trimethylbenzoyl)phenylphosphine) 2.0 parts.

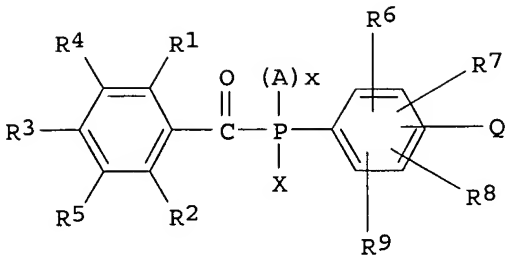
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 2003:173928 HCAPLUS
DOCUMENT NUMBER: 138:229271
TITLE: Bathochromic mono- and bis-acylphosphine oxides and sulfides as photoinitiators for polymerization of ethylenically unsaturated compounds
INVENTOR(S): **Wolf, Jean-Pierre; Hug, Gebhard**
PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.
SOURCE: PCT Int. Appl., 87 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003019295	A1	20030306	WO 2002-EP9045	20020813
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2454914	AA	20030306	CA 2002-2454914	20020813
EP 1423757	A1	20040602	EP 2002-796226	20020813
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002011921	A	20041026	BR 2002-11921	20020813
CN 1545643	A	20041110	CN 2002-816281	20020813
JP 2005501124	T2	20050113	JP 2003-523295	20020813
US 2004204613	A1	20041014	US 2004-485836	20040204
PRIORITY APPLN. INFO.:			CH 2001-1542 A	20010821
			WO 2002-EP9045 W	20020813

OTHER SOURCE(S): MARPAT 138:229271
GI



I

AB Disclosed are compds. of the general formula I (A = S, O; x = 0, 1; Q = SR10, N(R11)(R12); R1, R2 = C1-C24-alkyl, OR10, CF3, halogen; R3, R4, R5 = H, C1-C24-alkyl, OR10, halogen; two of the radicals R1, R2, R3, R4, and/or R5 together form C1-C20-alkylene substituted or unsubstituted by O, S, NR13; R6, R7, R8, R9 = H, C1-C24-alkyl, OR10, halogen, C2-C24-alkyl which is substituted one or more times by non-consecutive O, OH, SH; R10, R11 and R12 = H, C1-24-qlkyl, C2-24-alkenyl, C3-8-cycloalkyl, Ph, benzyl, C2-20-alkyl; or R11 and R12 together with N form 5-6-membered ring which may contain O, S, NR13; R13 = aH, Ph, C1-12-alkoxy, C1-12-alkyl; and X is as further disclosed in the claims). The inventive compds. are suitable as photoinitiators for printing inks and optical fiber coatings photopolymerizable compns., as well as some other photopolymerizable compns., especially for irradiation with light of relatively long wavelengths.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 4

ACCESSION NUMBER: 2001:903396 HCAPLUS
DOCUMENT NUMBER: 136:20158
TITLE: Preparation of organometallic monoacyl alkyl phosphines as photoinitiators
INVENTOR(S): **Wolf, Jean-Pierre; Hug, Gebhard**
PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.
SOURCE: Ger. Offen., 64 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10127171	A1	20011213	DE 2001-10127171	20010605
GB 2365430	A1	20020220	GB 2001-12580	20010524
GB 2365430	B2	20020828		
US 2002026049	A1	20020228	US 2001-871373	20010531
US 6737549	B2	20040518		
CA 2349829	AA	20011208	CA 2001-2349829	20010606
FR 2810041	A1	20011214	FR 2001-7438	20010607
CN 1329005	A	20020102	CN 2001-120898	20010607
BE 1014218	A5	20030603	BE 2001-389	20010607
ES 2194584	A1	20031116	ES 2001-1326	20010607
ES 2194584	B1	20050316		
NL 1018251	A1	20011214	NL 2001-1018251	20010608
NL 1018251	C2	20020218		

JP 2002069085	A2	20020308	JP 2001-174045	20010608
BR 2001002319	A	20020528	BR 2001-2319	20010608
US 2003130370	A1	20030710	US 2002-280819	20021025
US 7026017	B2	20060411		
US 2003139485	A1	20030724	US 2002-280820	20021025
US 6969733	B2	20051129		

PRIORITY APPLN. INFO.: CH 2000-1133 A 20000608
US 2001-871373 A3 20010531

OTHER SOURCE(S): CASREACT 136:20158; MARPAT 136:20158

AB The preparation of title compds., ArCOP(M)R (Ar = (un)substituted cyclopentyl, cyclohexyl, naphthyl, biphenylyl, O-, S-, N-containing 5 or 6-membered heterocyclic ring, etc.; R = (un)substituted C1-24 alkyl, O-, S-, N-containing C2-24 alkyl, alkenyl, (un)substituted C7-24-arylalkyl, C4-24-cycloalkyl, C8-24-arylcycloalkyl, etc.; M = H, Li, Na, K), useful as photoinitiators, is described. Thus, lithiation of isobutylphosphine with BuLi in THF/PhMe followed by treatment with 2,4,6-trimethylbenzoyl chloride gave lithium (2,4,6-trimethylbenzoyl)isobutylphosphine. Reaction of lithium (2,4,6-trimethylbenzoyl)isobutylphosphine with Bu bromide gave title compound, 2,4,6-C6H2COP(O)(Bu)(iso-Bu).

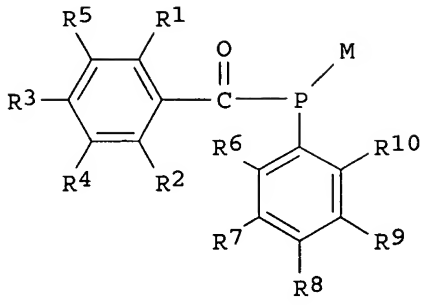
L61 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 5
ACCESSION NUMBER: 2001:579226 HCAPLUS
DOCUMENT NUMBER: 135:152962
TITLE: Preparation of organometallic monoacyl aryl phosphines as photoinitiators
INVENTOR(S): **Wolf, Jean-pierre**; Aebli, Beat Michael; **Hug, Gebhard**
PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.
SOURCE: Ger. Offen., 84 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10105046	A1	20010809	DE 2001-10105046	20010205
GB 2360283	A1	20010919	GB 2001-2398	20010131
GB 2360283	B2	20020821		
CH 694732	A	20050630	CH 2001-181	20010201
US 2001031898	A1	20011018	US 2001-776657	20010205
US 6399805	B2	20020604		
CA 2334291	AA	20010808	CA 2001-2334291	20010206
BE 1013960	A3	20030114	BE 2001-87	20010206
FR 2804683	A1	20010810	FR 2001-1630	20010207
FR 2804683	B1	20050408		
CN 1308081	A	20010815	CN 2001-103487	20010207
TW 555762	B	20031001	TW 2001-90102568	20010207
ES 2195706	A1	20031201	ES 2001-276	20010207
ES 2195706	B1	20050301		
NL 1017310	A1	20010809	NL 2001-1017310	20010208
NL 1017310	C2	20020618		
BR 2001000910	A	20011002	BR 2001-910	20010208
JP 2001270894	A2	20011002	JP 2001-31650	20010208
US 2002107413	A1	20020808	US 2001-37111	20011022
US 6579663	B2	20030617		

PRIORITY APPLN. INFO.: CH 2000-255 A 20000208
US 2001-776657 A3 20010205

OTHER SOURCE(S): CASREACT 135:152962; MARPAT 135:152962

GI



I

AB The preparation of title compds., I (R1, R2 = C1-20 alkyl, OR11, CF3, halo, etc.; R3, R4, R5 = H, C1-20 alkyl, OR11, halo, etc.; R6, R7, R8, R9, R10 = H, O, OH, and SH substituted C1-20 alkyl, C2-20 alkyl, N(R12)(R13), Ph, halo, etc.; R11 = C1-20 alkyl, C3-8 cycloalkyl, Ph, benzyl, C2-20 alkyl, etc.; R12, R13 = H, C1-20 alkyl, C3-8 cycloalkyl, Ph, benzyl, C2-20 alkyl, R12-R13 = O, S, amino substituted C3-5 alkylene; M = H, Li, Na, K), useful as acylphosphine oxide photoinitiators, is described. Thus, lithiation of dichloro(phenyl)phosphine with Li in THF in the presence of naphthalene followed by treatment with 2,4,6-trimethylbenzoyl chloride gave lithium (2,4,6-trimethylbenzoyl)phenylphosphine. Reaction of lithium (2,4,6-trimethylbenzoyl)phenylphosphine with 2,6-dimethoxybenzoyl chloride in THF followed by oxidation with H2O2 gave title compound, 2,4,6-trimethylbenzoyl(2,6-dimethoxybenzoyl)phosphine oxide.

L61 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:550744 HCAPLUS
DOCUMENT NUMBER: 131:299719
TITLE: Structure-Reactivity Relationships in Radical Reactions: A Novel Method for the Simultaneous Determination of Absolute Rate Constants and Structural Features
AUTHOR(S): Gatlik, Iwo; Rzadek, Piotr; Gescheidt, Georg; Rist, Guenther; Hellrung, Bruno; Wirz, Jakob; Dietliker, Kurt; **Hug, Gebhard**; Kunz, Martin; **Wolf, Jean-Pierre**
CORPORATE SOURCE: Institute of Physical Chemistry, University of Basel, Basel, 4056, Switz.
SOURCE: Journal of the American Chemical Society (1999), 121(36), 8332-8336
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Anal. of the ESR line width in time-resolved (TR-ESR) expts. is shown to be a suitable tool for the measurement of addition consts. of phosphinoyl and substituted benzoyl radicals. Compared with kinetic investigations, which make use of the resonance intensity or integral, observation of the line width as a function of monomer concentration has the advantage that the exptl. parameter is not affected by spin-polarization processes and, therefore, a lengthy determination of these polarization parameters is avoided. The resulting

addition consts. are discussed with respect to the exptl. hyperfine coupling consts. and the geometry of the radicals. TR-ESR expts. simultaneously provide rate consts. and ESR parameters and allow structure-reactivity relationships to be established.

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 7 OF 7 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
ACCESSION NUMBER: 2002-001304 [01] WPIX
DOC. NO. NON-CPI: N2002-000968
DOC. NO. CPI: C2002-000610
TITLE: New mono- and di-acyl phosphine derivatives, useful as photoinitiators for light-polymerizable compositions, e.g. coatings or inks.
DERWENT CLASS: A60 D21 E11 G02 G03 G05 G06 L03 P83
INVENTOR(S): AEBLI, B M; **HUG, G; WOLF, J P**
PATENT ASSIGNEE(S): (CIBA) CIBA SPECIALTY CHEM HOLDING INC
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
FR 2804683	A1	20010810	(200201)*		153	C07F009-50

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
FR 2804683	A1	FR 2001-1630	20010207

PRIORITY APPLN. INFO: CH 2000-255 20000208
INT. PATENT CLASSIF.:
MAIN: C07F009-50
SECONDARY: C07F009-28; C07F009-6521; C07F009-653; C07F009-6553; C08F002-50; C09D007-12; G03C009-08

BASIC ABSTRACT:
FR 2804683 A UPAB: 20020208
NOVELTY - P-acyl-phosphine derivatives (I).
DETAILED DESCRIPTION - Acyl-phosphines of formula (I) are new.
Ar-CO-P(M)-Ar1 (I)
Ar = 2-R1,3-R4,4-R3,5-R5,6-R2-phenyl (Ara), cyclopentyl, cyclohexyl, naphthyl, biphenylyl, anthracenyl, or 5-6 membered heterocycle containing oxygen, sulfur or nitrogen, all optionally substituted by halo and 1-4C alkyl or alkoxy;
R1 and R2 = 1-20C alkyl, OR11, trifluoromethyl or halo;
R3-R5 = hydrogen, 1-20C alkyl, OR11 or halo, or any two of R1-R5 together form a 1-20C alkylene, optionally interrupted by oxygen, sulfur or NR14;
Ar1 = 2-R6,3-R7,4-R8, 5-R9,6-R10-phenyl;
R6-R10 = hydrogen, 1-20C alkyl, 2-20C alkyl interrupted by one or more non-adjacent oxygen and optionally substituted by hydroxy and mercapto, OR11, phenyl or halo;
R11 = hydrogen, 1-20C alkyl, 2-20C alkenyl, 3-8C cycloalkyl, phenyl, benzyl, or 2-20C alkyl interrupted by one or more oxygen or sulfur and optionally substituted by hydroxy and/or mercapto;
R14 = hydrogen, phenyl, 1-12C alkyl or 2-12C alkyl interrupted by

one or more oxygen or sulfur and optionally substituted by hydroxy and/or mercapto;

M = hydrogen, lithium, sodium or potassium.

INDEPENDENT CLAIMS are also included for:

(a) preparing (I)-(III);

(b) photosetting composition (A) containing a photopolymerizable ethylenically unsaturated compound and (II) or (III) as photoinitiator;

(c) photopolymerization of non-volatile monomers, oligomers or polymers containing ethylenic bonds by irradiation of (A) at 200-600 nm;

(d) substrates coated on at least one surface with (A); and

(e) production of photographic images in relief by image-forming exposure of the substrate of (d) then removing non-exposed portions with solvent.

Ar-CO-P(=A)x(Ar)-CO-Y1 (II)

Ar-CO-P(=A)x(Ar)-Z1 (III)

A = oxygen or sulfur;

x = 0 or 1;

Y1 = alkyl or other substituent;

Z1 = alkyl or other substituent.

The full definitions are given in the DEFINITIONS (Full Definitions) Field.

USE - (I) are intermediates for other phosphine derivatives, and these are useful as photoinitiators for photopolymerization of ethylenically unsaturated compounds, e.g. for preparation of (pigmented) surface coatings, printing and other inks; printing plates; adhesives; dental compositions; composite materials; stencils; color filters etc., also for encapsulating electronic components, recording of holograms and many other applications.

Dwg.0/0

FILE SEGMENT: CPI GMPI
FIELD AVAILABILITY: AB; DCN
MANUAL CODES: CPI: A02-A09; A08-C09; D08-A; E05-G03B; E05-G03C; G02-A02; G02-A04A; G02-A05; G03-B02; G05-A; G06-D; G06-D05; G06-E; G06-F03B; G06-F03C; G06-F03D; L03-D01D; L03-G02; L03-G05

=> □

=> => file registry
FILE 'REGISTRY' ENTERED AT 10:38:39 ON 06 JUL 2006
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STRUCTURE SEARCH

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

(Registry, CASREACT, BEILSTEIN, MARPAT)

STRUCTURE FILE UPDATES: 5 JUL 2006 HIGHEST RN 890705-10-9
DICTIONARY FILE UPDATES: 5 JUL 2006 HIGHEST RN 890705-10-9

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http://www.cas.org/ONLINE/UG/regprops.html

=> file hcaplus
FILE 'HCAPLUS' ENTERED AT 10:38:46 ON 06 JUL 2006
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FILE COVERS 1907 - 6 Jul 2006 VOL 145 ISS 2
FILE LAST UPDATED: 5 Jul 2006 (20060705/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d stat que L26
L5 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L9 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
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L12 111 SEA FILE=HCAPLUS ABB=ON PLU=ON L11
L21 9 SEA FILE=REGISTRY SUB=L11 SSS FUL L5
L25 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L21
L26 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 AND L12

=> d stat que L33
L5 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L9 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

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L12          111 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11
L21            9 SEA FILE=REGISTRY SUB=L11 SSS FUL L5
L25            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L21
L26            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L25 AND L12
L29          162 SEA FILE=REGISTRY ABB=ON  PLU=ON  (938-18-1/BI OR 109-65-9/BI
                 OR 159968-28-2/BI OR 1989-53-3/BI OR 352706-49-1/BI OR
                 352706-50-4/BI OR 88-95-9/BI OR 106-94-5/BI OR 106-95-6/BI OR
                 108-23-6/BI OR 109-72-8/BI OR 109227-12-5/BI OR 117421-97-3/BI
                 OR 1237-53-2/BI OR 135991-03-6/BI OR 14602-86-9/BI OR 16331-52-
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                 171056-56-7/BI OR 171056-57-8/BI OR 171056-58-9/BI OR 171056-59
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                 1885-14-9/BI OR 18908-66-2/BI OR 20412-38-8/BI OR 2094-72-6/BI
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                 24625-82-9/BI OR 25629-50-9/BI OR 28920-43-6/BI OR 2937-50-0/BI
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                 352706-34-4/BI OR 352706-35-5/BI OR 352706-36-6/BI OR 352706-37
                 -7/BI OR 352706-38-8/BI OR 352706-39-9/BI OR 352706-40-2/BI OR
                 352706-41-3/BI OR 352706-42-4/BI OR 352706-43-5/BI OR 352706-44
                 -6/BI OR 352706-45-7/BI OR 352706-46-8/BI OR 352706-47-9/BI OR
                 352706-48-0/BI OR 352706-51-5/BI OR 352706-52-6/BI OR 352706-53
                 -7/BI OR 352706-54-8/BI OR 352706-55-9/BI OR 352706-56-0/BI OR
                 352706-57-1/BI OR 352706-58-2/BI OR 352706-59-3/BI OR 352706-60
                 -6/BI OR 352706-61-7/BI OR 352706-62-8/BI OR 352706-63-9/BI OR
                 352706-64-0/BI OR 352706-65-1/BI OR 352706-66-2/BI OR 352706-67
                 -3/BI OR 352706-68-4/BI OR 352706-69-5/BI OR 352706-70-8/BI OR
                 352706-71-9/BI OR 352706-72-0/BI OR 352706-73-1/BI OR 352706-74
                 -2/BI OR 352706-75-3/BI OR 352706-76-4/BI OR 352706-77-5/BI OR
                 352706-78-6/BI OR 352706-79-7/BI OR 352706-80-0/BI OR 352706-81
                 -1/BI OR 352706-82-2/BI OR 352706-83-3/BI OR 352706-84-4/BI OR
                 352706-85-5/BI OR 352706-86-6/BI OR 352706-87-7/BI OR 352706-88
                 -8/BI OR 352706-89-9/BI OR 352706-90-2/BI OR 352706-91-3/BI OR
                 352706-92-4/BI OR 3527
L31            5 SEA FILE=REGISTRY ABB=ON  PLU=ON  L29 AND PMS/CI
L32          365 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L31
L33            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L26 AND L32


=> d stat que L36
L5               STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L9               STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L11          274 SEA FILE=REGISTRY SSS FUL L9
L12          111 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11
L21            9 SEA FILE=REGISTRY SUB=L11 SSS FUL L5
L25            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L21
L26            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L25 AND L12
L29          162 SEA FILE=REGISTRY ABB=ON  PLU=ON  (938-18-1/BI OR 109-65-9/BI
                 OR 159968-28-2/BI OR 1989-53-3/BI OR 352706-49-1/BI OR
                 352706-50-4/BI OR 88-95-9/BI OR 106-94-5/BI OR 106-95-6/BI OR
                 108-23-6/BI OR 109-72-8/BI OR 109227-12-5/BI OR 117421-97-3/BI
```

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                OR 1237-53-2/BI OR 135991-03-6/BI OR 14602-86-9/BI OR 16331-52-
                5/BI OR 171056-53-4/BI OR 171056-54-5/BI OR 171056-55-6/BI OR
                171056-56-7/BI OR 171056-57-8/BI OR 171056-58-9/BI OR 171056-59
                -0/BI OR 17201-83-1/BI OR 17341-93-4/BI OR 1871-76-7/BI OR
                1885-14-9/BI OR 18908-66-2/BI OR 20412-38-8/BI OR 2094-72-6/BI
                OR 219997-22-5/BI OR 23288-61-1/BI OR 24468-13-1/BI OR
                24625-82-9/BI OR 25629-50-9/BI OR 28920-43-6/BI OR 2937-50-0/BI
                 OR 305813-37-0/BI OR 312-94-7/BI OR 3229-00-3/BI OR 3282-30-2/
                BI OR 3395-91-3/BI OR 34914-36-8/BI OR 352706-33-3/BI OR
                352706-34-4/BI OR 352706-35-5/BI OR 352706-36-6/BI OR 352706-37
                -7/BI OR 352706-38-8/BI OR 352706-39-9/BI OR 352706-40-2/BI OR
                352706-41-3/BI OR 352706-42-4/BI OR 352706-43-5/BI OR 352706-44
                -6/BI OR 352706-45-7/BI OR 352706-46-8/BI OR 352706-47-9/BI OR
                352706-48-0/BI OR 352706-51-5/BI OR 352706-52-6/BI OR 352706-53
                -7/BI OR 352706-54-8/BI OR 352706-55-9/BI OR 352706-56-0/BI OR
                352706-57-1/BI OR 352706-58-2/BI OR 352706-59-3/BI OR 352706-60
                -6/BI OR 352706-61-7/BI OR 352706-62-8/BI OR 352706-63-9/BI OR
                352706-64-0/BI OR 352706-65-1/BI OR 352706-66-2/BI OR 352706-67
                -3/BI OR 352706-68-4/BI OR 352706-69-5/BI OR 352706-70-8/BI OR
                352706-71-9/BI OR 352706-72-0/BI OR 352706-73-1/BI OR 352706-74
                -2/BI OR 352706-75-3/BI OR 352706-76-4/BI OR 352706-77-5/BI OR
                352706-78-6/BI OR 352706-79-7/BI OR 352706-80-0/BI OR 352706-81
                -1/BI OR 352706-82-2/BI OR 352706-83-3/BI OR 352706-84-4/BI OR
                352706-85-5/BI OR 352706-86-6/BI OR 352706-87-7/BI OR 352706-88
                -8/BI OR 352706-89-9/BI OR 352706-90-2/BI OR 352706-91-3/BI OR
                352706-92-4/BI OR 3527
L34             4 SEA FILE=REGISTRY ABB=ON  PLU=ON  L29 AND A1/PG
L35         10272 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L34
L36             2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L35 AND L26


=> d stat que L39
L5              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L9              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L11           274 SEA FILE=REGISTRY SSS FUL L9
L12           111 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11
L21             9 SEA FILE=REGISTRY SUB=L11 SSS FUL L5
L25             4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L21
L26             4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L25 AND L12
L29           162 SEA FILE=REGISTRY ABB=ON  PLU=ON  (938-18-1/BI OR 109-65-9/BI
                OR 159968-28-2/BI OR 1989-53-3/BI OR 352706-49-1/BI OR
                352706-50-4/BI OR 88-95-9/BI OR 106-94-5/BI OR 106-95-6/BI OR
                108-23-6/BI OR 109-72-8/BI OR 109227-12-5/BI OR 117421-97-3/BI
                OR 1237-53-2/BI OR 135991-03-6/BI OR 14602-86-9/BI OR 16331-52-
                5/BI OR 171056-53-4/BI OR 171056-54-5/BI OR 171056-55-6/BI OR
                171056-56-7/BI OR 171056-57-8/BI OR 171056-58-9/BI OR 171056-59
                -0/BI OR 17201-83-1/BI OR 17341-93-4/BI OR 1871-76-7/BI OR
                1885-14-9/BI OR 18908-66-2/BI OR 20412-38-8/BI OR 2094-72-6/BI
                OR 219997-22-5/BI OR 23288-61-1/BI OR 24468-13-1/BI OR
                24625-82-9/BI OR 25629-50-9/BI OR 28920-43-6/BI OR 2937-50-0/BI
                 OR 305813-37-0/BI OR 312-94-7/BI OR 3229-00-3/BI OR 3282-30-2/
                BI OR 3395-91-3/BI OR 34914-36-8/BI OR 352706-33-3/BI OR
```

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                352706-34-4/BI OR 352706-35-5/BI OR 352706-36-6/BI OR 352706-37
                -7/BI OR 352706-38-8/BI OR 352706-39-9/BI OR 352706-40-2/BI OR
                352706-41-3/BI OR 352706-42-4/BI OR 352706-43-5/BI OR 352706-44
                -6/BI OR 352706-45-7/BI OR 352706-46-8/BI OR 352706-47-9/BI OR
                352706-48-0/BI OR 352706-51-5/BI OR 352706-52-6/BI OR 352706-53
                -7/BI OR 352706-54-8/BI OR 352706-55-9/BI OR 352706-56-0/BI OR
                352706-57-1/BI OR 352706-58-2/BI OR 352706-59-3/BI OR 352706-60
                -6/BI OR 352706-61-7/BI OR 352706-62-8/BI OR 352706-63-9/BI OR
                352706-64-0/BI OR 352706-65-1/BI OR 352706-66-2/BI OR 352706-67
                -3/BI OR 352706-68-4/BI OR 352706-69-5/BI OR 352706-70-8/BI OR
                352706-71-9/BI OR 352706-72-0/BI OR 352706-73-1/BI OR 352706-74
                -2/BI OR 352706-75-3/BI OR 352706-76-4/BI OR 352706-77-5/BI OR
                352706-78-6/BI OR 352706-79-7/BI OR 352706-80-0/BI OR 352706-81
                -1/BI OR 352706-82-2/BI OR 352706-83-3/BI OR 352706-84-4/BI OR
                352706-85-5/BI OR 352706-86-6/BI OR 352706-87-7/BI OR 352706-88
                -8/BI OR 352706-89-9/BI OR 352706-90-2/BI OR 352706-91-3/BI OR
                352706-92-4/BI OR 3527
L37           31 SEA FILE=REGISTRY ABB=ON  PLU=ON  L29 AND X>1
L38         5398 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L37
L39            3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L26 AND L38


=> s L26 or L33 or L36 or L39
L62            4 L26 OR L33 OR L36 OR L39

=> file casreact
FILE 'CASREACT' ENTERED AT 10:40:19 ON 06 JUL 2006
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FILE CONTENT:1840 - 2 Jul 2006 VOL 145 ISS 1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

************************************************************
*                                                          *
*     CASREACT now has more than 10 million reactions      *
*                                                          *
************************************************************

Some CASREACT records are derived from the ZIC/VINITI database (1974-1991)
provided by InfoChem, INPI data prior to 1986, and Biotransformations
database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance
identification.

=> d stat que L16
L3             STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L9             STR
```

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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L11         274 SEA FILE=REGISTRY SSS FUL L9
L14           7 SEA FILE=REGISTRY SUB=L11 SSS FUL L3
L16           0 SEA FILE=CASREACT ABB=ON  PLU=ON  L14/PRO


=> file beilstein
FILE 'BEILSTEIN' ENTERED AT 10:40:43 ON 06 JUL 2006
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FILE LAST UPDATED ON JUNE 16, 2006

FILE COVERS 1771 TO 2006.
*** FILE CONTAINS  9,606,495 SUBSTANCES ***

>>>PLEASE NOTE: Reaction Data and substance data are stored in
   separate documents and can not be searched together in one query.
   Reaction data for BEILSTEIN compounds may be displayed
   immediately with the display codes PRE (preparations) and REA
   (reactions).  A substance answer set retrieved after the search
   for a chemical name, a compounds with available reaction
   information by combining with PRE/FA, REA/FA or more generally
   with RX/FA. The BEILSTEIN Registry Number (BRN) is the link
   between a BEILSTEIN compound and belonging reactions. For mo
   detailed reaction searches BRNs can be searched as reaction
   partner BRNs Reactant BRN (RX.RBRN) or Product BRN (RX.PBRN).<<<

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE  <<<

**********************************************************************
* PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST.                 *
* SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE    *
* ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE           *
* ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS.                         *
* FOR PRICE INFORMATION SEE HELP COST                                 *
**********************************************************************
    NEW
* PATENT NUMBERS (PN) AND BABS ACCESSION NUMBERS (BABSAN) CAN NOW BE
  SEARCHED, SELECTED AND TRANSFERRED.
* NEW DISPLAY FORMATS ALLREF, ALLP AND BABSAN SHOW ALL REFERENCES,
  ALL PATENT REFERENCES, OR ALL BABS ACCESSION NUMBERS FOR A
  COMPOUND AT A GLANCE.

=> d stat que L28
L5              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L28           0 SEA FILE=BEILSTEIN SSS FUL L5

100.0% PROCESSED     632 ITERATIONS                          0 ANSWERS
SEARCH TIME: 00.00.02


=> file marpat
```

```
FILE 'MARPAT' ENTERED AT 10:41:00 ON 06 JUL 2006
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FILE CONTENT: 1961-PRESENT VOL 145 ISS 1 (20060630/ED)

SOME MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US   2006094872 04 MAY 2006
DE 102004050353 20 APR 2006
EP      1647549 19 APR 2006
JP   2006108158 20 APR 2006
WO   2006053912 26 MAY 2006
GB      2419093 19 APR 2006
FR      2876691 21 APR 2006
RU      2273632 10 APR 2006
CA      2518664 10 MAR 2006

Expanded G-group definition display now available.

New CAS Information Use Policies, enter HELP USAGETERMS for details.


=> d stat que L48
L5              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L41          25 SEA FILE=MARPAT SSS FUL L5
L46             STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L48           4 SEA FILE=MARPAT SUB=L41 SSS FUL L46

100.0% PROCESSED      23 ITERATIONS                              4 ANSWERS
SEARCH TIME: 00.00.01


=> dup rem L62 L48
FILE 'HCAPLUS' ENTERED AT 10:41:37 ON 06 JUL 2006
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FILE 'MARPAT' ENTERED AT 10:41:37 ON 06 JUL 2006
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PROCESSING COMPLETED FOR L62
PROCESSING COMPLETED FOR L48
L63           6 DUP REM L62 L48 (2 DUPLICATES REMOVED)
                ANSWERS '1-4' FROM FILE HCAPLUS
```

ANSWERS '5-6' FROM FILE MARPAT

=> d ibib abs hitind hitstr L63 1-4; d ibib abs hit L63 5-6

L63 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2003:991523 HCAPLUS
DOCUMENT NUMBER: 140:28640
TITLE: Multimer forms of monoacylphosphine oxides and bisacylphosphine oxides
INVENTOR(S): Wolf, Jean-Pierre; Hug, Gebhard
PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003104245	A1	20031218	WO 2003-EP5801	20030603
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2489246	AA	20031218	CA 2003-2489246	20030603
AU 2003274653	A1	20031222	AU 2003-274653	20030603
EP 1511754	A1	20050309	EP 2003-740176	20030603
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003012133	A	20050405	BR 2003-12133	20030603
CN 1659175	A	20050824	CN 2003-813477	20030603
JP 2005529167	T2	20050929	JP 2004-511314	20030603
US 2005245768	A1	20051103	US 2004-517231	20041207
PRIORITY APPLN. INFO.:			EP 2002-405473 A	20020611
			WO 2003-EP5801 W	20030603

OTHER SOURCE(S): MARPAT 140:28640
AB The invention relates to dimer and multimer forms of bisacylphosphine oxides (BAPO) compds. of the formula [R2COPO(R1)]nQ[COPO(R1)COR2]m and dimer and multimer forms of monoacylphosphine oxides (MAPO) compds. of the formula [R1PO(R3)CO]nQ[COPO(R3)R1]m: wherein R1, R2, and R3 independently of one another are unsubstituted or substituted C1-C12 alkyl, benzyl, C1-C12 alkoxy, C3-C6 cycloalkyl or C5-C14 aryl; Q is a di-tri or tetravalent arylene residue; n is 1-4, m is 0-2, n + m is 2, 3 or 4, with the proviso, that R1 and R3 are different from each other. Thus, [phenyl(2,4,6-trimethylbenzoyl)phosphinoyl]{2,4,6-trimethyl-3-[phenyl(2,4,6-trimethylbenzoyl)phosphinoanecarbonyl]phenyl}methanone was synthesized and used as a photoinitiator for UV-curable coatings.
IC ICM C07F009-53
ICS C07F009-6568; C07F009-28; C08F002-50; G03F007-029
CC 42-3 (Coatings, Inks, and Related Products)
Section cross-reference(s): 67
IT **352706-49-1P**, [Phenyl(2,4,6-trimethylbenzoyl)phosphinoyl]{2,4,6-trimethyl-3-[phenyl(2,4,6-trimethylbenzoyl)phosphinoanecarbonyl]phenyl}met

hanone **352706-50-4P 634600-42-3P 634600-43-4P 634600-44-5P**, [3-(Benzylisobutylphosphinoanecarbonyl)-2,4,6-trimethylphenyl(benzylisobutylphosphinoyl)methanone **634600-45-6P 634600-46-7P 634600-47-8P**
RL: CAT (Catalyst use); IMF (Industrial manufacture); PRP (Properties); PREP (Preparation); USES (Uses)
(photoinitiator; production of multimer forms of mono- and bis-acylphosphine oxides for coatings)

IT **109-72-8**, Butyl lithium, uses
RL: CAT (Catalyst use); USES (Uses)
(production of multimer forms of mono- and bis-acylphosphine oxides for coatings)

IT 42978-66-5DP, Tripropylene glycol diacrylate, reaction products with epoxy acrylates and polysiloxane acrylates **51728-26-8DP**, Ebecryl 40, reaction products with acrylates, epoxy acrylates, and polysiloxane acrylates **52408-84-1DP**, OTA 480, reaction products with acrylates, epoxy acrylates, and polysiloxane acrylates **97949-13-8DP**, Ebecryl 605, reaction products with epoxy acrylates and polysiloxane acrylates **135991-03-6DP**, Ebecryl 7100, reaction products with acrylates, epoxy acrylates, and polysiloxane acrylates
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(production of multimer forms of mono- and bis-acylphosphine oxides for coatings)

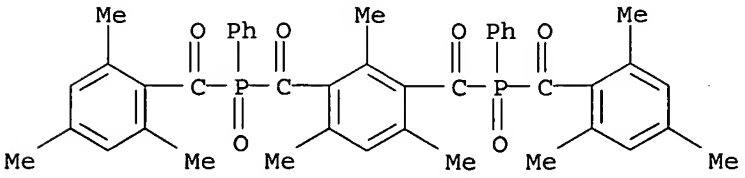
IT **219997-22-5**, Dow Corning 57
RL: MOA (Modifier or additive use); USES (Uses)
(silicone additives; production of multimer forms of mono- and bis-acylphosphine oxides for coatings)

IT **88-95-9**, Phthaloyldichloride 109-65-9, n-Butylbromide 618-32-6, Benzoylbromide 638-21-1, Phenylphosphine 938-18-1, 2,4,6-Trimethylbenzoylchloride 4023-52-3, Isobutylphosphine **37686-18-3**, 3,3',4,4'-Benzophenone tetracarboxylic acid tetrachloride **159968-28-2**, 2,4,6-Trimethylbenzoyl-1,3-dicarboxylic acid dichloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting materials; production of multimer forms of mono- and bis-acylphosphine oxides for coatings)

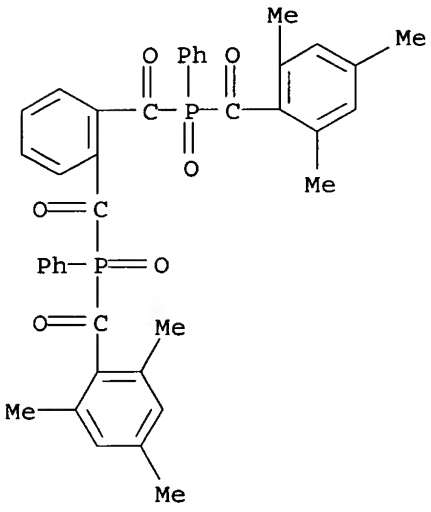
IT **352706-49-1P**, [Phenyl(2,4,6-trimethylbenzoyl)phosphinoyl]{2,4,6-trimethyl-3-[phenyl(2,4,6-trimethylbenzoyl)phosphinoanecarbonyl]phenyl}methanone **352706-50-4P 634600-42-3P 634600-43-4P 634600-44-5P**, [3-(Benzylisobutylphosphinoanecarbonyl)-2,4,6-trimethylphenyl(benzylisobutylphosphinoyl)methanone **634600-45-6P 634600-46-7P 634600-47-8P**
RL: CAT (Catalyst use); IMF (Industrial manufacture); PRP (Properties); PREP (Preparation); USES (Uses)
(photoinitiator; production of multimer forms of mono- and bis-acylphosphine oxides for coatings)

RN 352706-49-1 HCAPLUS

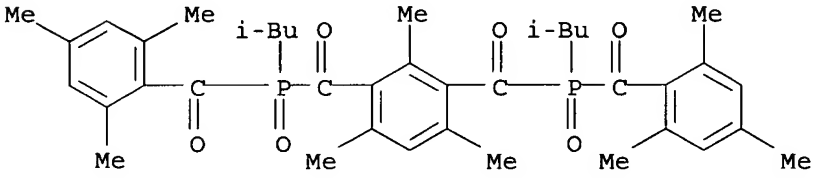
CN Phosphine oxide, [(2,4,6-trimethyl-1,3-phenylene)dicarbonyl]bis[phenyl(2,4,6-trimethylbenzoyl)- (9CI) (CA INDEX NAME)



RN 352706-50-4 HCAPLUS
CN Phosphine oxide, (1,2-phenylenedicarbonyl)bis[phenyl(2,4,6-trimethylbenzoyl)- (9CI) (CA INDEX NAME)

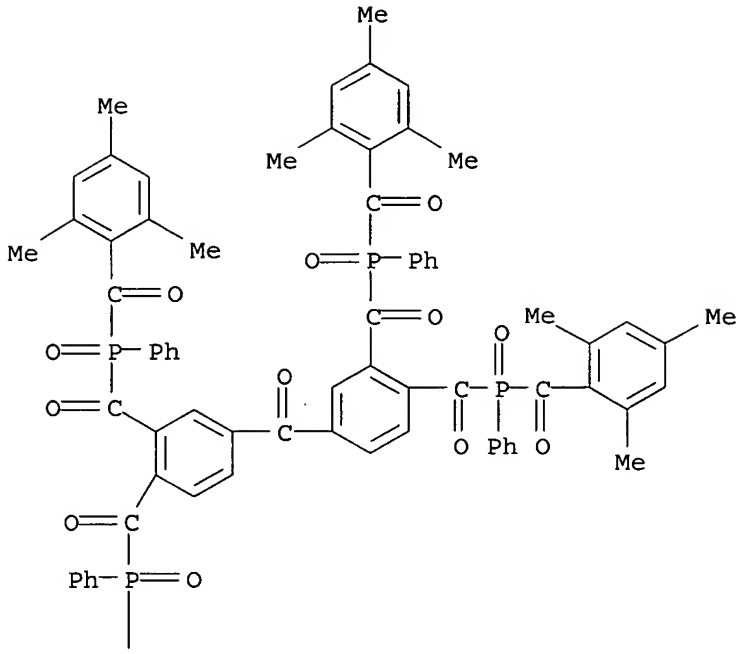


RN 634600-42-3 HCAPLUS
CN Phosphine oxide, [(2,4,6-trimethyl-1,3-phenylene)dicarbonyl]bis[(2-methylpropyl)(2,4,6-trimethylbenzoyl)- (9CI) (CA INDEX NAME)

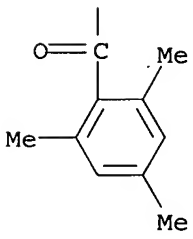


RN 634600-43-4 HCAPLUS
CN Methanone, bis[3,4-bis[[phenyl(2,4,6-trimethylbenzoyl)phosphinyl]carbonyl]phenyl]- (9CI) (CA INDEX NAME)

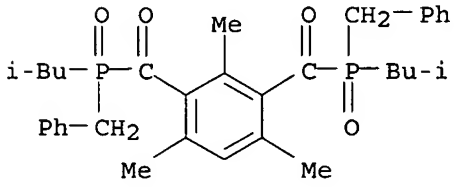
PAGE 1-A



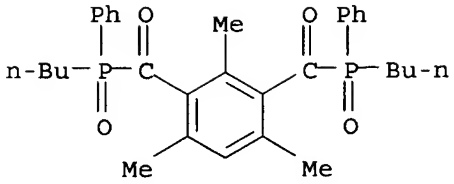
PAGE 2-A



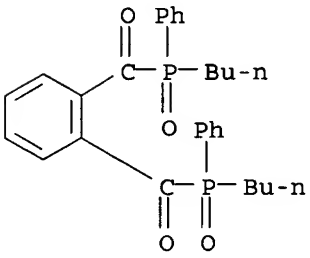
RN 634600-44-5 HCAPLUS
CN Phosphine oxide, [(2,4,6-trimethyl-1,3-phenylene)dicarbonyl]bis[(2-methylpropyl)(phenylmethyl)- (9CI) (CA INDEX NAME)



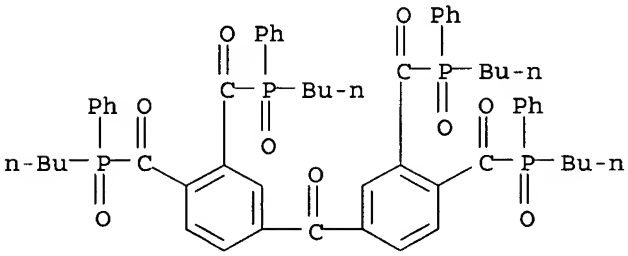
RN 634600-45-6 HCAPLUS
CN Phosphine oxide, [(2,4,6-trimethyl-1,3-phenylene)dicarbonyl]bis[butylphenyl- (9CI) (CA INDEX NAME)



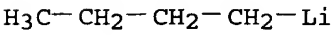
RN 634600-46-7 HCAPLUS
CN Phosphine oxide, (1,2-phenylenedicarbonyl)bis[butylphenyl- (9CI) (CA INDEX NAME)



RN 634600-47-8 HCAPLUS
CN Methanone, bis[3,4-bis[(butylphenylphosphinyl)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



IT **109-72-8**, Butyl lithium, uses
RL: CAT (Catalyst use); USES (Uses)
(production of multimer forms of mono- and bis-acylphosphine oxides for coatings)
RN 109-72-8 HCAPLUS
CN Lithium, butyl- (8CI, 9CI) (CA INDEX NAME)



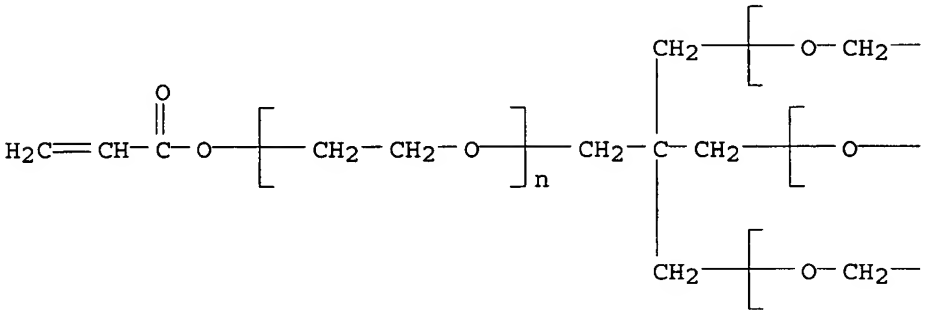
IT **51728-26-8DP**, Ebecryl 40, reaction products with acrylates, epoxy acrylates, and polysiloxane acrylates **52408-84-1DP**, OTA 480, reaction products with acrylates, epoxy acrylates, and polysiloxane acrylates **97949-13-8DP**, Ebecryl 605, reaction products with epoxy acrylates and polysiloxane acrylates **135991-03-6DP**, Ebecryl 7100, reaction products with acrylates, epoxy acrylates, and polysiloxane acrylates

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(production of multimer forms of mono- and bis-acylphosphine oxides for coatings)

RN 51728-26-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-hydro-ω-[(1-oxo-2-propenyl)oxy]-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (9CI) (CA INDEX NAME)

PAGE 1-A



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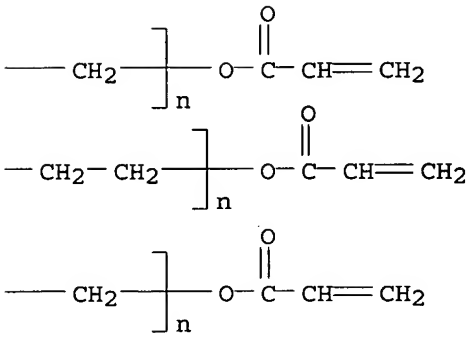
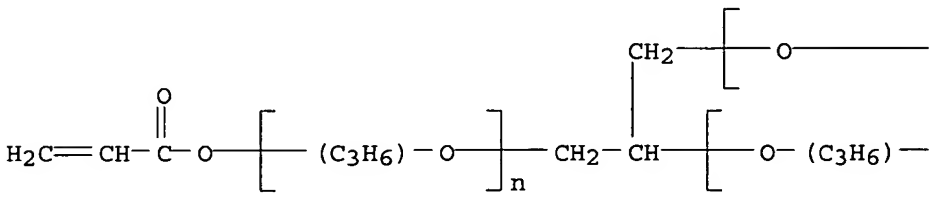


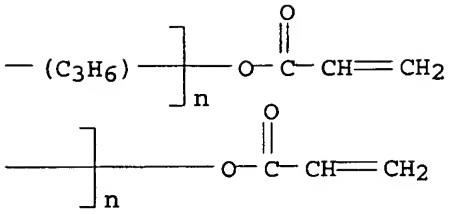
RN 52408-84-1 HCAPLUS

CN Poly[oxy(methyl-1,2-ethanediyl)], α,α',α''-1,2,3-propanetriyltris[ω-[(1-oxo-2-propenyl)oxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



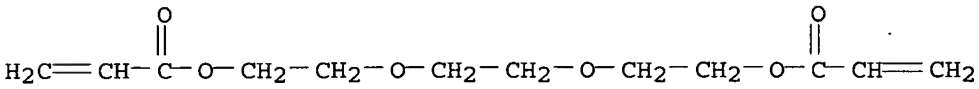
PAGE 1-B



RN 97949-13-8 HCAPLUS
CN 2-Propenoic acid, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] ester, polymer with (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 42978-66-5
CMF C15 H24 O6
CCI IDS

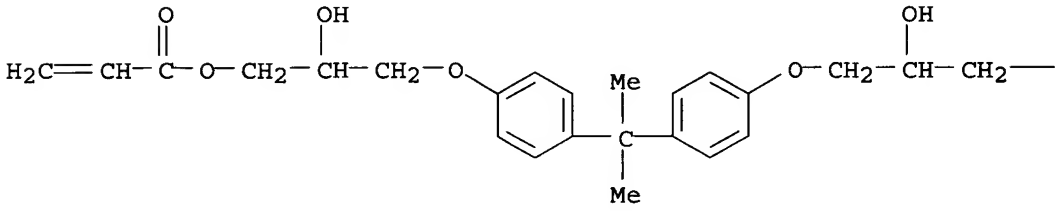


3 (D1—Me)

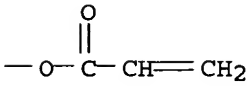
CM 2

CRN 4687-94-9
CMF C27 H32 O8

PAGE 1-A



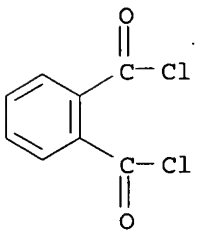
PAGE 1-B



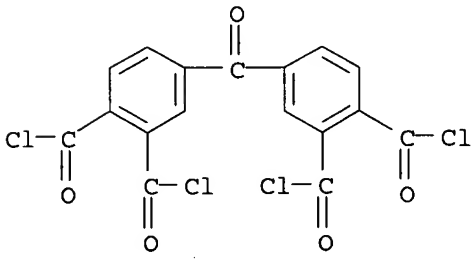
RN 135991-03-6 HCAPLUS
CN Ebecryl 7100 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **219997-22-5**, Dow Corning 57
RL: MOA (Modifier or additive use); USES (Uses)
(silicone additives; production of multimer forms of mono- and bis-acylphosphine oxides for coatings)
RN 219997-22-5 HCAPLUS
CN Dow Corning 57 (9CI) (CA INDEX NAME)

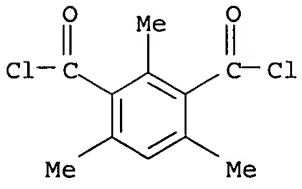
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **88-95-9**, Phthaloyldichloride **37686-18-3**, 3,3',4,4'-Benzophenone tetracarboxylic acid tetrachloride **159968-28-2**, 2,4,6-Trimethylbenzoyl-1,3-dicarboxylic acid dichloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting materials; production of multimer forms of mono- and bis-acylphosphine oxides for coatings)
RN 88-95-9 HCAPLUS
CN 1,2-Benzenedicarbonyl dichloride (9CI) (CA INDEX NAME)



RN 37686-18-3 HCAPLUS
CN 1,2-Benzenedicarbonyl dichloride, 4,4'-carbonylbis- (9CI) (CA INDEX NAME)



RN 159968-28-2 HCAPLUS
CN 1,3-Benzenedicarbonyl dichloride, 2,4,6-trimethyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS

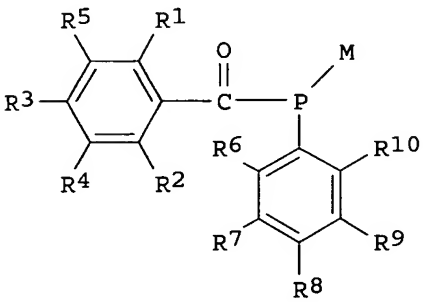
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L63 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2001:579226 HCAPLUS
DOCUMENT NUMBER: 135:152962
TITLE: Preparation of organometallic monoacyl aryl phosphines as photoinitiators
INVENTOR(S): Wolf, Jean-pierre; Aebli, Beat Michael; Hug, Gebhard
PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.
SOURCE: Ger. Offen., 84 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10105046	A1	20010809	DE 2001-10105046	20010205
GB 2360283	A1	20010919	GB 2001-2398	20010131
GB 2360283	B2	20020821		
CH 694732	A	20050630	CH 2001-181	20010201
US 2001031898	A1	20011018	US 2001-776657	20010205
US 6399805	B2	20020604		
CA 2334291	AA	20010808	CA 2001-2334291	20010206
BE 1013960	A3	20030114	BE 2001-87	20010206
FR 2804683	A1	20010810	FR 2001-1630	20010207
FR 2804683	B1	20050408		
CN 1308081	A	20010815	CN 2001-103487	20010207
TW 555762	B	20031001	TW 2001-90102568	20010207
ES 2195706	A1	20031201	ES 2001-276	20010207
ES 2195706	B1	20050301		
NL 1017310	A1	20010809	NL 2001-1017310	20010208
NL 1017310	C2	20020618		
BR 2001000910	A	20011002	BR 2001-910	20010208
JP 2001270894	A2	20011002	JP 2001-31650	20010208
US 2002107413	A1	20020808	US 2001-37111	20011022
US 6579663	B2	20030617		

PRIORITY APPLN. INFO.: CH 2000-255 A 20000208
US 2001-776657 A3 20010205

OTHER SOURCE(S): CASREACT 135:152962; MARPAT 135:152962
GI



I

AB The preparation of title compds., I (R1, R2 = C1-20 alkyl, OR11, CF3, halo, etc.; R3, R4, R5 = H, C1-20 alkyl, OR11, halo, etc.; R6, R7, R8, R9, R10 = H, O, OH, and SH substituted C1-20 alkyl, C2-20 alkyl, N(R12)(R13), Ph, halo, etc.; R11 = C1-20 alkyl, C3-8 cycloalkyl, Ph, benzyl, C2-20 alkyl, etc.; R12, R13 = H, C1-20 alkyl, C3-8 cycloalkyl, Ph, benzyl, C2-20 alkyl, R12-R13 = O, S, amino substituted C3-5 alkylene; M = H, Li, Na, K), useful as acylphosphine oxide photoinitiators, is described. Thus, lithiation of dichloro(phenyl)phosphine with Li in THF in the presence of naphthalene followed by treatment with 2,4,6-trimethylbenzoyl chloride gave lithium (2,4,6-trimethylbenzoyl)phenylphosphine. Reaction of lithium (2,4,6-trimethylbenzoyl)phenylphosphine with 2,6-dimethoxybenzoyl chloride in THF followed by oxidation with H2O2 gave title compound, 2,4,6-trimethylbenzoyl(2,6-dimethoxybenzoyl)phosphine oxide.

IC ICM C07F009-53
ICS C07F009-50; C07F009-547; C08F002-50; B41N001-00; H01L023-29; B81C001-00; A61K006-00

CC 29-7 (Organometallic and Organometalloidal Compounds)
Section cross-reference(s): 74

IT **644-97-3**, Dichloro(phenyl)phosphine 54722-14-4, Isobutylphenylphosphine
RL: RCT (Reactant); RACT (Reactant or reagent)
(lithiation and sequential reaction with acyl chloride)

IT **352706-35-5P 352706-36-6P 352706-37-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with acyl chlorides)

IT 352706-33-3P 352706-34-4P 352706-38-8P 352706-39-9P
352706-40-2P 352706-41-3P 352706-42-4P 352706-43-5P
352706-44-6P 352706-45-7P 352706-46-8P 352706-47-9P 352706-48-0P
352706-49-1P 352706-50-4P 352706-51-5P 352706-52-6P
352706-53-7P 352706-54-8P **352706-55-9P** 352706-56-0P
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352706-62-8P **352706-63-9P 352706-64-0P** 352706-65-1P
352706-66-2P 352706-67-3P 352706-68-4P 352706-69-5P 352706-70-8P
352706-71-9P 352706-72-0P **352706-73-1P 352706-74-2P**
352706-75-3P 352706-76-4P 352706-77-5P 352706-78-6P 352706-79-7P
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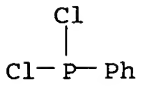
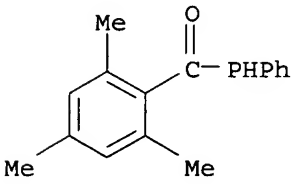
352706-85-5P 352706-86-6P **352706-87-7P** 352706-88-8P
352706-89-9P 352706-90-2P 352706-91-3P 352706-92-4P
352706-93-5P 352706-94-6P 352706-95-7P 352706-96-8P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation as acylphosphine oxide photoinitiator)

IT 79-22-1, Methyl chloroformate 83-01-2 88-10-8 **88-95-9**, Phthalic acid dichloride 96-32-2 106-94-5 106-95-6, reactions 108-23-6 109-65-9 **312-94-7** 501-53-1, Benzyl chloroformate 541-41-3, Ethyl chloroformate 543-27-1 592-34-7 **609-67-6** 879-18-5, 1-Naphthoyl chloride 933-88-0 937-62-2 938-18-1, 2,4,6-Trimethylbenzoyl chloride 1237-53-2 1871-76-7, Diphenylacetyl chloride 1885-14-9 1989-53-3, 2,6-Dimethoxybenzoyl chloride 2094-72-6 2937-50-0 **3229-00-3** 3282-30-2, Pivaloyl chloride 3395-91-3 **4300-97-4 4659-45-4**, 2,6-Dichlorobenzoyl chloride **4801-27-8** 7144-08-3 7452-59-7 14602-86-9 16331-52-5, 9-Anthracenecarbonyl chloride 17201-83-1 **17341-93-4** 18908-66-2 20412-38-8 24468-13-1 24625-82-9 **25629-50-9** 28920-43-6 35718-08-2 40635-66-3 **52334-81-3** 55150-29-3 57199-00-5 58249-87-9 **66270-36-8 79676-60-1** **92600-11-8 94923-33-8 109227-12-5** **159968-28-2** 305813-37-0 **352706-99-1**
RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction with lithiated organophosphine)
IT **644-97-3**, Dichloro(phenyl)phosphine
RL: RCT (Reactant); RACT (Reactant or reagent)
(lithiation and sequential reaction with acyl chloride)
RN 644-97-3 HCAPLUS
CN Phosphonous dichloride, phenyl- (6CI, 8CI, 9CI) (CA INDEX NAME)



IT **352706-35-5P 352706-36-6P 352706-37-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with acyl chlorides)
RN 352706-35-5 HCAPLUS
CN Phosphine, phenyl(2,4,6-trimethylbenzoyl)-, lithium salt (9CI) (CA INDEX NAME)



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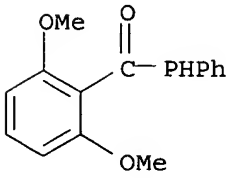
CN Phosphine, (2,6-dimethoxybenzoyl)phenyl-, lithium salt (9CI) (CA INDEX NAME)



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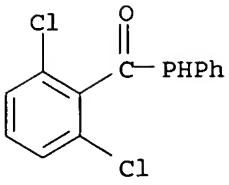
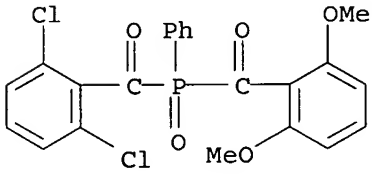
CN Phosphine, (2,6-dichlorobenzoyl)phenyl-, lithium salt (9CI) (CA INDEX NAME)



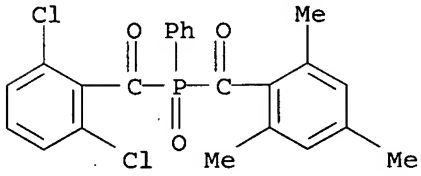
● Li

IT **352706-40-2P 352706-41-3P 352706-49-1P**
352706-50-4P 352706-55-9P 352706-63-9P
352706-64-0P 352706-73-1P 352706-74-2P
352706-87-7P 352706-93-5P 352706-94-6P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation as acylphosphine oxide photoinitiator)

RN 352706-40-2 HCAPLUS
CN Phosphine oxide, (2,6-dichlorobenzoyl)(2,6-dimethoxybenzoyl)phenyl- (9CI) (CA INDEX NAME)



RN 352706-41-3 HCAPLUS
CN Phosphine oxide, (2,6-dichlorobenzoyl)phenyl(2,4,6-trimethylbenzoyl)- (9CI) (CA INDEX NAME)



RN 352706-49-1 HCAPLUS
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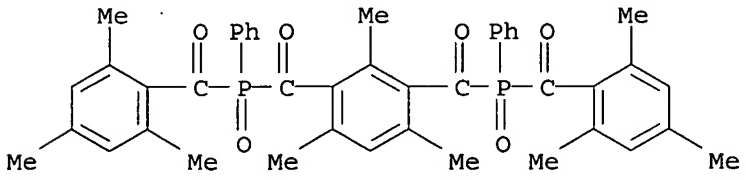
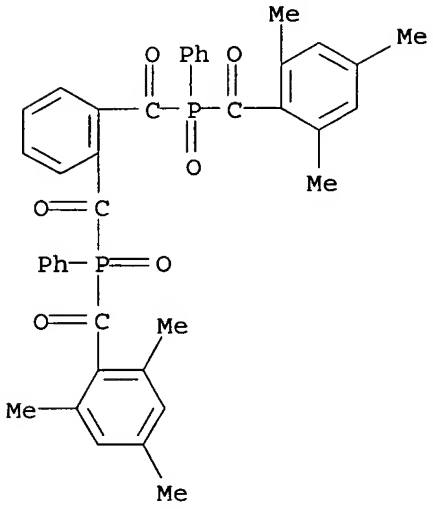
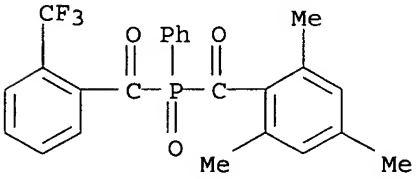


RN 352706-50-4 HCAPLUS

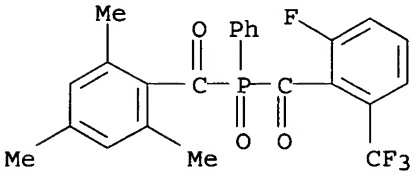
CN Phosphine oxide, (1,2-phenylenedicarbonyl)bis[phenyl(2,4,6-trimethylbenzoyl)- (9CI) (CA INDEX NAME)



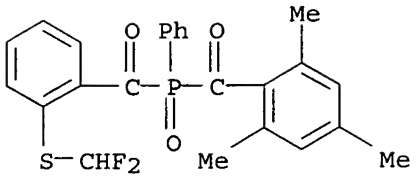
RN 352706-55-9 HCAPLUS
CN Phosphine oxide, phenyl[2-(trifluoromethyl)benzoyl](2,4,6-trimethylbenzoyl)- (9CI) (CA INDEX NAME)



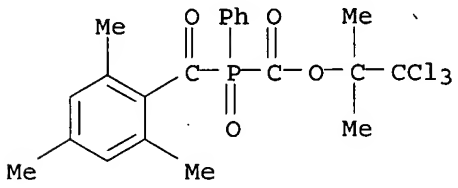
RN 352706-63-9 HCAPLUS
CN Phosphine oxide, [2-fluoro-6-(trifluoromethyl)benzoyl]phenyl(2,4,6-trimethylbenzoyl)- (9CI) (CA INDEX NAME)



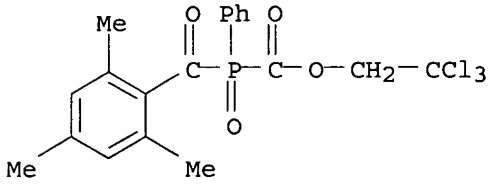
RN 352706-64-0 HCAPLUS
CN Phosphine oxide, [2-[(difluoromethyl)thio]benzoyl]phenyl(2,4,6-trimethylbenzoyl)- (9CI) (CA INDEX NAME)



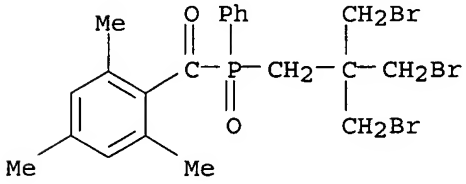
RN 352706-73-1 HCAPLUS
CN Phosphinecarboxylic acid, phenyl(2,4,6-trimethylbenzoyl)-, 2,2,2-trichloro-1,1-dimethylethyl ester, oxide (9CI) (CA INDEX NAME)



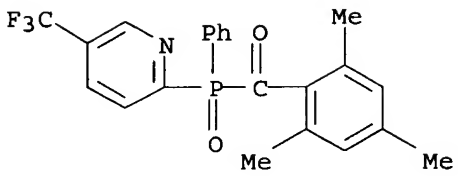
RN 352706-74-2 HCAPLUS
CN Phosphinecarboxylic acid, phenyl(2,4,6-trimethylbenzoyl)-, 2,2,2-trichloroethyl ester, oxide (9CI) (CA INDEX NAME)



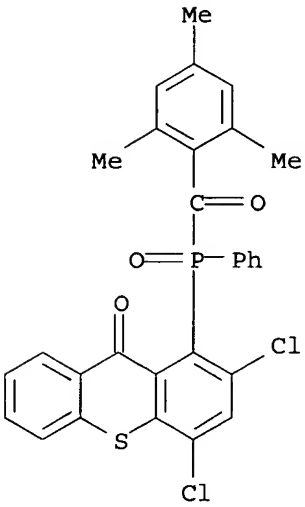
RN 352706-87-7 HCAPLUS
CN Phosphine oxide, [3-bromo-2,2-bis(bromomethyl)propyl]phenyl(2,4,6-trimethylbenzoyl)- (9CI) (CA INDEX NAME)



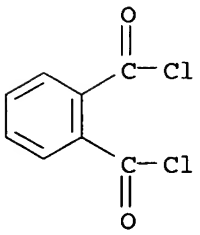
RN 352706-93-5 HCAPLUS
CN Pyridine, 2-[phenyl(2,4,6-trimethylbenzoyl)phosphinyl]-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



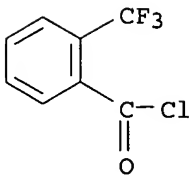
RN 352706-94-6 HCAPLUS
CN 9H-Thioxanthen-9-one, 2,4-dichloro-1-[phenyl(2,4,6-trimethylbenzoyl)phosphinyl]- (9CI) (CA INDEX NAME)



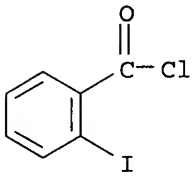
IT **88-95-9**, Phthalic acid dichloride **312-94-7**
609-67-6 3229-00-3 4300-97-4 4659-45-4
, 2,6-Dichlorobenzoyl chloride **4801-27-8 17341-93-4**
25629-50-9 52334-81-3 66270-36-8
79676-60-1 92600-11-8 94923-33-8
109227-12-5 159968-28-2 352706-99-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with lithiated organophosphine)
RN 88-95-9 HCAPLUS
CN 1,2-Benzenedicarbonyl dichloride (9CI) (CA INDEX NAME)



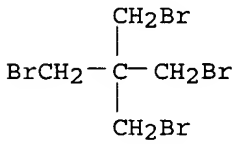
RN 312-94-7 HCAPLUS
CN Benzoyl chloride, 2-(trifluoromethyl)- (9CI) (CA INDEX NAME)



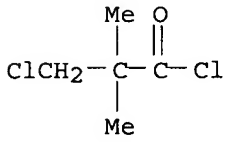
RN 609-67-6 HCAPLUS
CN Benzoyl chloride, 2-iodo- (9CI) (CA INDEX NAME)



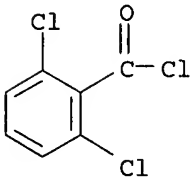
RN 3229-00-3 HCAPLUS
CN Propane, 1,3-dibromo-2,2-bis(bromomethyl)- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



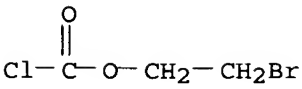
RN 4300-97-4 HCAPLUS
CN Propanoyl chloride, 3-chloro-2,2-dimethyl- (9CI) (CA INDEX NAME)



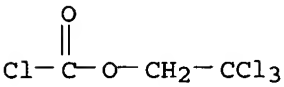
RN 4659-45-4 HCAPLUS
CN Benzoyl chloride, 2,6-dichloro- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



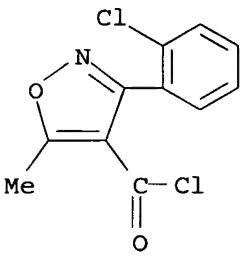
RN 4801-27-8 HCAPLUS
CN Carbonochloridic acid, 2-bromoethyl ester (9CI) (CA INDEX NAME)



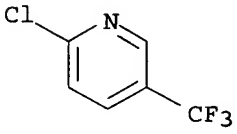
RN 17341-93-4 HCAPLUS
CN Carbonochloridic acid, 2,2,2-trichloroethyl ester (9CI) (CA INDEX NAME)



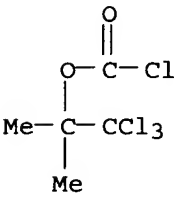
RN 25629-50-9 HCAPLUS
CN 4-Isoxazolecarbonyl chloride, 3-(2-chlorophenyl)-5-methyl- (9CI) (CA INDEX NAME)



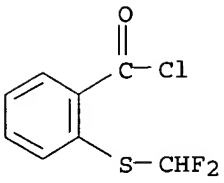
RN 52334-81-3 HCAPLUS
CN Pyridine, 2-chloro-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



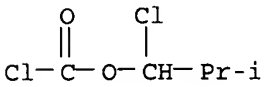
RN 66270-36-8 HCAPLUS
CN Carbonochloridic acid, 2,2,2-trichloro-1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



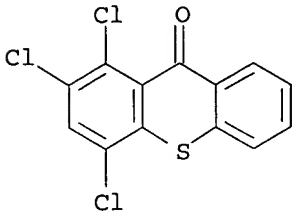
RN 79676-60-1 HCAPLUS
CN Benzoyl chloride, 2-[(difluoromethyl)thio]- (9CI) (CA INDEX NAME)



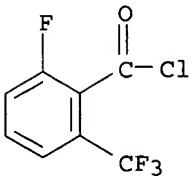
RN 92600-11-8 HCAPLUS
CN Carbonochloridic acid, 1-chloro-2-methylpropyl ester (9CI) (CA INDEX NAME)



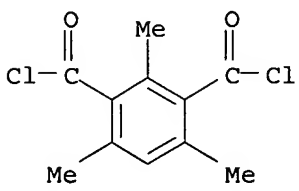
RN 94923-33-8 HCAPLUS
CN 9H-Thioxanthen-9-one, 1,2,4-trichloro- (9CI) (CA INDEX NAME)



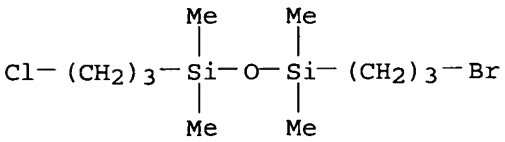
RN 109227-12-5 HCAPLUS
CN Benzoyl chloride, 2-fluoro-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 159968-28-2 HCAPLUS
CN 1,3-Benzenedicarbonyl dichloride, 2,4,6-trimethyl- (9CI) (CA INDEX NAME)

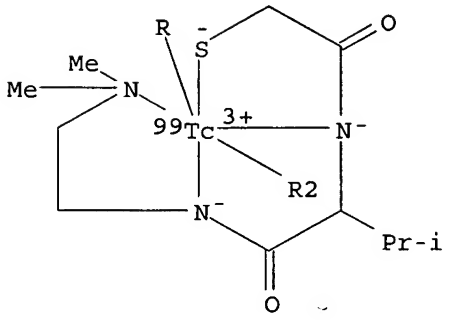


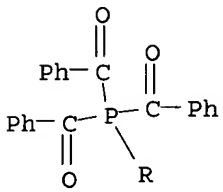
RN 352706-99-1 HCAPLUS
CN Disiloxane, 1-(3-bromopropyl)-3-(3-chloropropyl)-1,1,3,3-tetramethyl- (9CI) (CA INDEX NAME)



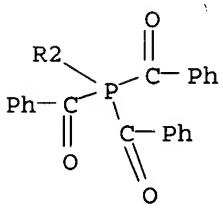
L63 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:679211 HCAPLUS
DOCUMENT NUMBER: 138:133196
TITLE: Preparation and biodistribution of mixed complexes of 99Tcm-phosphine
AUTHOR(S): Zhang, Hua-Bei; Li, Bo; Qi, Chuan-Min; Xie, Yi; Guo, Xue-Feng; Dai, Mei; Liu, Bo-Li
CORPORATE SOURCE: Department of Chemistry, Beijing Normal University, Beijing, 100875, Peop. Rep. China
SOURCE: He Huaxue Yu Fangshe Huaxue (2002), 24(2), 84-90
CODEN: HHHHDH; ISSN: 0253-9950
PUBLISHER: Yuanzineng Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB A N3S ligand (MVNM) and four phosphine ligands are synthesized. 99Tcm-MVNM, which is prepared under room temperature through ligand-exchange reaction, reacts with the four phosphine ligands resp. to obtain mixed complexes of 99Tcm-MVNM-phosphine. The distribution results in mice indicate these complexes exhibit certain myocardial uptake.
CC 8-9 (Radiation Biochemistry)
Section cross-reference(s): 63
IT 492468-03-8P 492468-04-9P **492468-05-0P 492468-06-1P**
RL: PKT (Pharmacokinetics); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and biodistribution of mixed complexes of 99Tcm-phosphine)
IT **492468-05-0P 492468-06-1P**
RL: PKT (Pharmacokinetics); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and biodistribution of mixed complexes of 99Tcm-phosphine)
RN 492468-05-0 HCAPLUS
CN Technetium-99Tc, [(2S)-N-[2-(dimethylamino-κN)ethyl]-2-[[(mercapto-κS)acetyl]amino-κN]-3-methylbutanamidato(3-)-κN]bis(tribenzoylphosphine-κP)-, (OC-6-52)- (9CI) (CA INDEX NAME)

PAGE 1-A



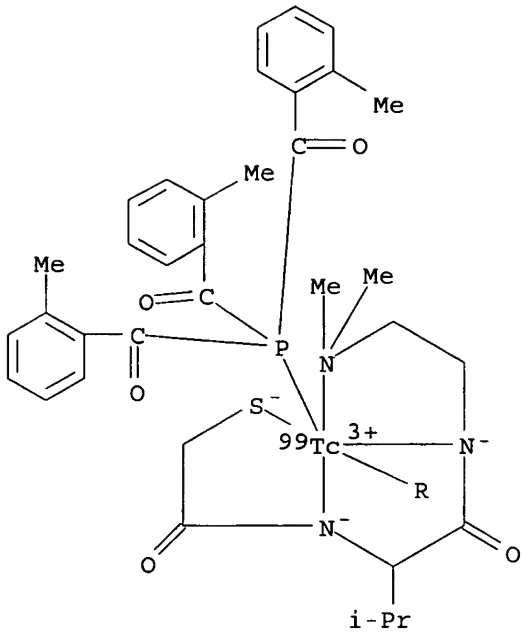


PAGE 2-A

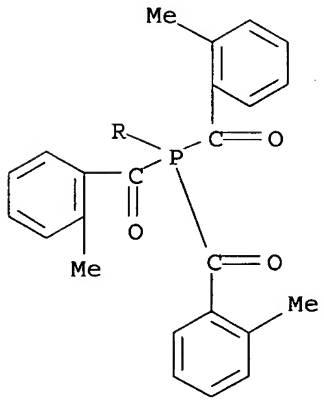


RN 492468-06-1 HCAPLUS
CN Technetium-99Tc, [(2S)-N-[2-(dimethylamino-κN)ethyl]-2-[[(mercapto-κS)acetyl]amino-κN]-3-methylbutanamidato(3-)-κN]bis[tris(2-methylbenzoyl)phosphine-κP]-, (OC-6-52)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

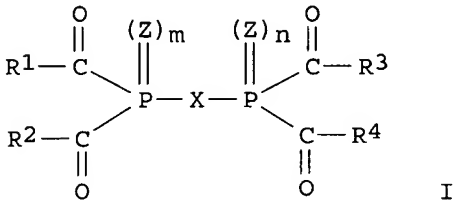


L63 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:963518 HCAPLUS
DOCUMENT NUMBER: 123:341295
TITLE: Preparation of dimeric bisacylphosphines and bisacylphosphine oxides as photoinitiators
INVENTOR(S): Leppard, David G.; Koehler, Manfred
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Eur. Pat. Appl., 38 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 670323	A1	19950906	EP 1995-810102	19950217
EP 670323	B1	20000628		
R: BE, DE, ES, FR, GB, IT, NL				
ES 2148463	T3	20001016	ES 1995-810102	19950217
CA 2143571	AA	19950903	CA 1995-2143571	19950228
JP 07278215	A2	19951024	JP 1995-68625	19950302
JP 3653676	B2	20050602		
US 5723512	A	19980303	US 1996-669807	19960627
PRIORITY APPLN. INFO.:			CH 1994-614 A	19940302
			US 1995-392563 B1	19950223

OTHER SOURCE(S): MARPAT 123:341295
GI



I

AB The title compds. [I; R1-R4 = C1-20 alkyl, cycloalkyl, C2-8 alkenyl, (un)substituted Ph, (un)substituted naphthyl, (un)substituted biphenyl; R1-R4 can form an (un)substituted 5- or 6-membered heterocyclic ring with O, S, or N, etc.; R6 = C1-4 alkyl, Ph; X = alkylene (un)interrupted with ≥1 heteroatom or group, alkenylene, (un)substituted phenylene, (decahydro)naphthylene, etc.] were prepared by acylation of phosphines H2PXPH2 (X as defined) with acyl chlorides followed by oxidation or conversion to phosphine sulfides (no data for the latter reaction). For example, 2% 1,10-bis[bis(2,4,6-trimethylbenzoyl)phosphine oxide]decane (preparation by benzoylation of decamethylenebisphosphine with 2,4,6-Me3C6H2COCl followed by oxidation with H2O2 given) was added to an UV-curable pigmented coating obtained by blending polyester acrylate oligomer (Ebecryl 830) 67.5, hexanediol diacrylate 5.0, trimethylolpropane triacrylate 2.5, and TiO2 25.0 parts, the blend was coated on an Al substrate and cured with 2 passes at 10 m/min under an 80-W/cm Hg lamp to give a wiping resistant coating with pendulum hardness 113 immediately and 163 after 15-min postcuring.

IC ICM C07F009-50
ICS C08F002-50; G03F007-029; C07F009-53

CC 35-3 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 38, 42, 74

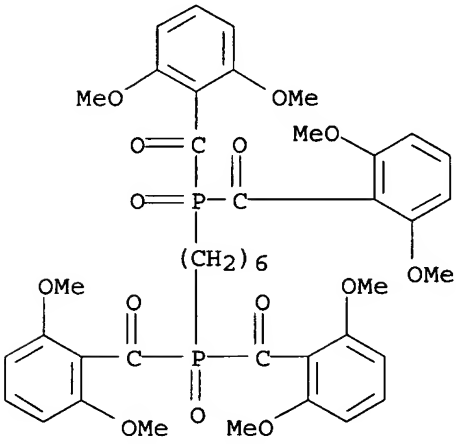
IT **171056-53-4P 171056-54-5P 171056-55-6P**
171056-56-7P 171056-57-8P 171056-58-9P
171056-59-0P
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of dimeric bisacylphosphines and bisacylphosphine oxides as photoinitiators)

IT **171056-53-4P 171056-54-5P 171056-55-6P**
171056-56-7P 171056-57-8P 171056-58-9P
171056-59-0P
RL: IMF (Industrial manufacture); PREP (Preparation)

(preparation of dimeric bisacylphosphines and bisacylphosphine oxides as photoinitiators)

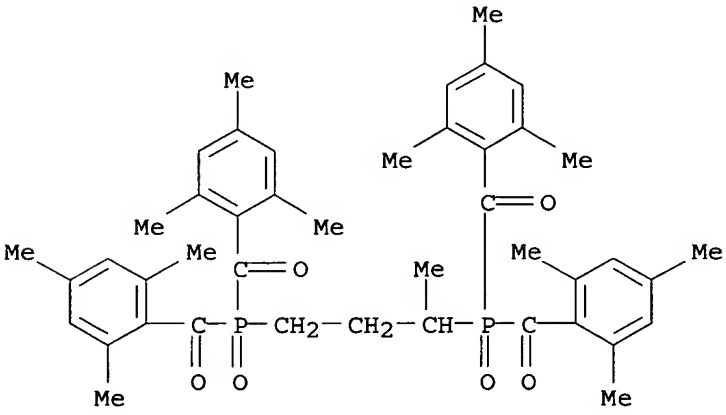
RN 171056-53-4 HCAPLUS

CN Phosphine oxide, 1,6-hexanediylbis[bis(2,6-dimethoxybenzoyl)- (9CI) (CA INDEX NAME)



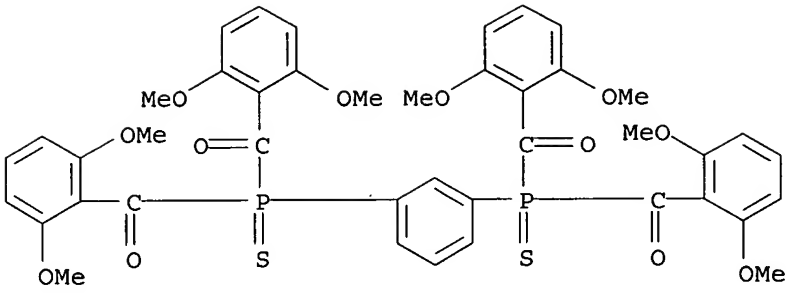
RN 171056-54-5 HCAPLUS

CN Phosphine oxide, (1-methyl-1,3-propanediyl)bis[bis(2,4,6-trimethylbenzoyl)- (9CI) (CA INDEX NAME)

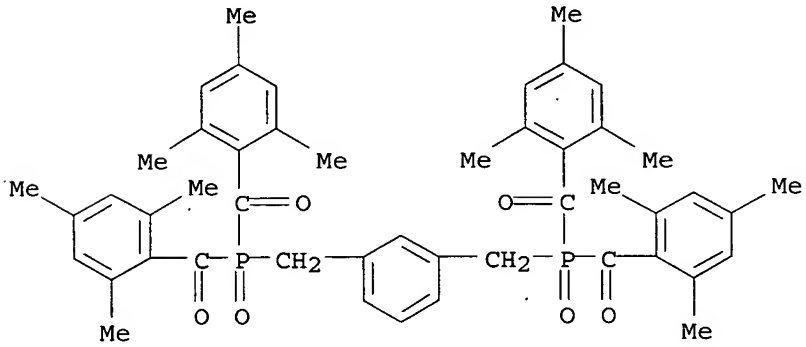


RN 171056-55-6 HCAPLUS

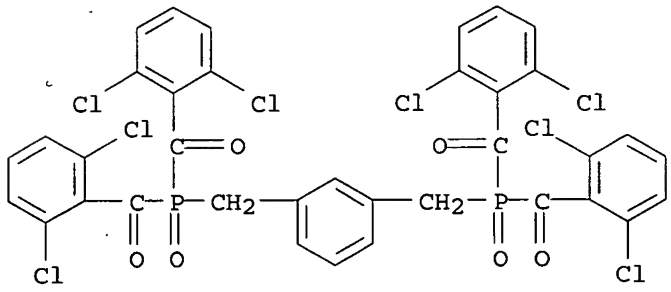
CN Phosphine sulfide, 1,3-phenylenebis[bis(2,6-dimethoxybenzoyl)- (9CI) (CA INDEX NAME)



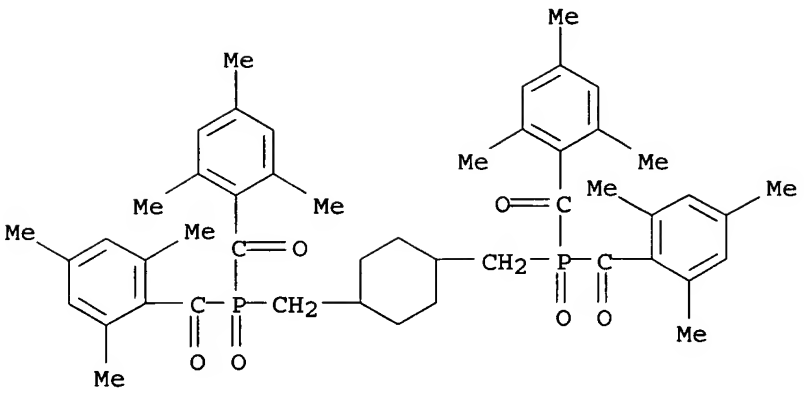
RN 171056-56-7 HCAPLUS
CN Phosphine oxide, [1,3-phenylenebis(methylene)]bis[bis(2,4,6-trimethylbenzoyl)- (9CI) (CA INDEX NAME)



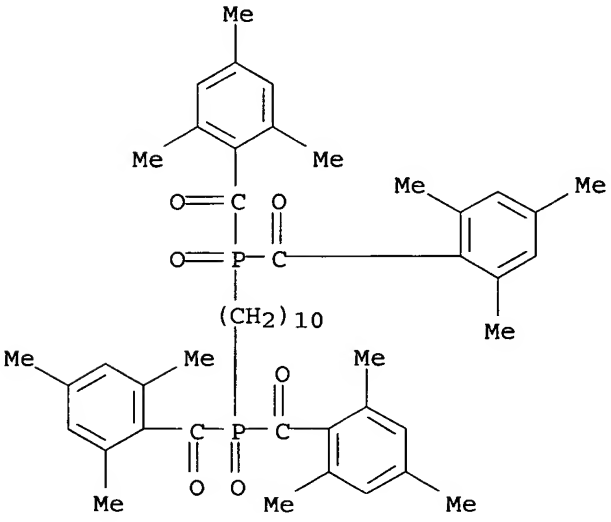
RN 171056-57-8 HCAPLUS
CN Phosphine oxide, [1,3-phenylenebis(methylene)]bis[bis(2,6-dichlorobenzoyl)- (9CI) (CA INDEX NAME)



RN 171056-58-9 HCAPLUS
CN Phosphine oxide, [1,4-cyclohexanediylbis(methylene)]bis[bis(2,4,6-trimethylbenzoyl)- (9CI) (CA INDEX NAME)



RN 171056-59-0 HCAPLUS
CN Phosphine oxide, 1,10-decanediylbis[bis(2,4,6-trimethylbenzoyl)- (9CI) (CA INDEX NAME)



L63 ANSWER 5 OF 6 MARPAT COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 129:68885 MARPAT
TITLE: Photoinitiator mixture containing acylphosphine oxide and benzophenone derivatives
INVENTOR(S): Beck, Erich; Kandzia, Christof; Prantl, Bernhard; Lokai, Matthias; Enenkel, Peter; Keil, Edmund; Menzel, Klaus
PATENT ASSIGNEE(S): BASF A.-G., Germany
SOURCE: Ger. Offen., 12 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19650562	A1	19980610	DE 1996-19650562	19961205
WO 9828340	A1	19980702	WO 1997-EP6423	19971118
W: CA, CN, KR, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 942937	A1	19990922	EP 1997-952778	19971118
EP 942937	B1	20010418		
R: BE, CH, DE, FR, GB, IT, LI, SE				
TW 434288	B	20010516	TW 1997-86117781	19971126
US 6207727	B1	20010327	US 1998-147459	19981230
KR 2000057388	A	20000915	KR 1999-704943	19990604
PRIORITY APPLN. INFO.:			DE 1996-19650562	19961205
			WO 1997-EP6423	19971118

AB Curing photoinitiators contain at least one mono- or diacylphosphine oxide R1R2P(O)C(O)R3 (R1 = organic group; R2 = organic group optionally including a carbonyl; R3 = organic group optionally including another phosphine oxide) and at least one benzophenone containing at least one substituent at a total level of 0.005-10%. The photoinitiators have low volatility and are not inhibited by air and are suitable for UV-cured coatings. Several examples were given using either 2,4,6-trimethylbenzoyl(diphenyl)phosphine oxide or 2,4,6-trimethylbenzoyl(ethoxy)phenylphosphine oxide and an 80:20 mixture of 2,4,6-trimethylbenzophenone and 4-methylbenzophenone with Laromer PO 84F pigmented and clear coatings.

MSTR 1

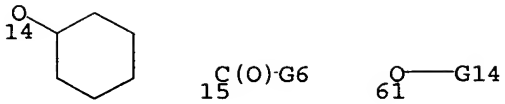
G16

G1 = **alkyl <containing 1-18 C>** /
alkyl <containing 1-4 C> (substd. by 1 or more G2) /
cycloalkyl <containing 5-8 C> /
alkyl <containing 1-3 C> (substd. by Ph) /
Ph (opt. substd. by 1 or more G3) /
naphthyl (opt. substd. by 1 or more G3) /
biphenylyl (opt. substd. by 1 or more G3) /
heterocycle <containing zero or more N, zero or more O,
zero or more S (no other heteroatoms),
5- to 6-membered monocyclic ring> / (Example: CH2CH2CHMe2)

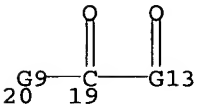
G2 = halo / alkoxy <containing 1-6 C>

G3 = halo / alkyl <containing 1-12 C> /
alkoxy <containing 1-12 C>

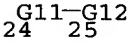
G4 = Ph (opt. substd. by 1 or more G3) /
naphthyl (opt. substd. by 1 or more G3) /
biphenylyl (opt. substd. by 1 or more G3) /
heterocycle <containing zero or more N, zero or more O,
zero or more S (no other heteroatoms),
5- to 6-membered monocyclic ring> /
alkoxy <containing 1-18 C> / OPh (opt. substd. by 1 or more
G5) / OCH2Ph / 14 / **15** / (Example: 61)



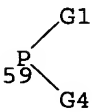
G5 = halo / alkyl <containing 1-4 C> /
alkoxy <containing 1-4 C>
G6 = alkyl <containing 1-18 C> /
alkyl <containing 1-4 C> (substd. by 1 or more G7) /
cycloalkyl <containing 5-8 C> /
alkyl <containing 1-3 C> (substd. by Ph) /
Ph (opt. substd. by 1 or more G18) /
naphthyl (opt. substd. by 1 or more G3) /
biphenylyl (opt. substd. by 1 or more G3) /
heterocycle <containing zero or more N, zero or more O,
zero or more S (no other heteroatoms),
5- to 6-membered monocyclic ring>
G7 = halo / alkoxy <containing 1-4 C>
G8 = alkyl <containing 1-18 C> /
alkyl <containing 1-4 C> (substd. by 1 or more G2) /
cycloalkyl <containing 5-8 C> /
alkyl <containing 1-3 C> (substd. by Ph) /
Ph (opt. substd. by 1 or more G18) /
naphthyl (opt. substd. by 1 or more G3) /
biphenylyl (opt. substd. by 1 or more G3) /
heterocycle <containing zero or more N, zero or more O,
zero or more S (no other heteroatoms),
5- to 6-membered monocyclic ring> / **20**



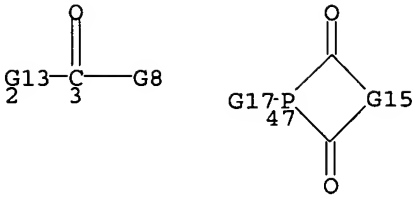
G9 = alkylene <containing 2-8 C> / **cyclohexylene** /
phenylene (opt. substd. by 1 or more G10) / 24-3 25-19



G10 = halo / alkyl <containing 1-4 C> /
alkoxy <containing 1-4 C>
G11 = phenylene (opt. substd. by 1 or more G10)
G12 = phenylene (opt. substd. by 1 or more G10)
G13 = **59** / heterocycle <containing 1 or more heteroatoms,
1 or more P, attached through 1 P>



G14 = Et / Pr-n / Pr-i / Bu-n / Bu-i / pentyl
G15 = alkylene <containing 2-12 C> / CH=CH / o-C6H4
G16 = **2** / 47



G17 = alkyl <containing 1-18 C> /
alkyl <containing 1-4 C> (substd. by 1 or more G2) /
cycloalkyl <containing 5-8 C> /
alkyl <containing 1-3 C> (substd. by Ph) /
Ph (opt. substd. by 1 or more G3) /
naphthyl (opt. substd. by 1 or more G3) /
biphenylyl (opt. substd. by 1 or more G3) /
heterocycle <containing zero or more N, zero or more O, zero or more S (no other heteroatoms), 5- to 6-membered monocyclic ring>
G18 = halo / alkyl <containing 1-12 C> /
alkoxy <containing 1-12 C> / (Examples: Me / Et / Pr-i / OMe / Cl)
Patent location: claim 1

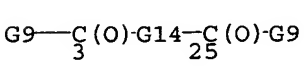
L63 ANSWER 6 OF 6 MARPAT COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 116:43140 MARPAT
TITLE: Mixture of photoinitiators
INVENTOR(S): Koehler, Manfred; Angerer, Hermann Franz; Litzler, Andre
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 446175	A2	19910911	EP 1991-810134	19910228
EP 446175	A3	19911121		
R: DE, FR, GB, IT				
CA 2037769	AA	19910910	CA 1991-2037769	19910307
JP 04220404	A2	19920811	JP 1991-69127	19910308
PRIORITY APPLN. INFO.:			CH 1990-764	19900309

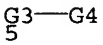
AB A photopolymn. initiator mixture and photohardenable composition containing the mixture
are claimed where the initiator is a mixture of 3 components: R1P(:O)R2C(:O)R3(I) 100 weight%, II 10-70 weight%, and ≥1 from III 10-70 weight%. The unspecified groups in I have the following definitions: R1 = alkyl, cycloalkyl, phenylalkyl, Ph, naphthyl, etc.; R2 = Ph, naphthyl, biphenyl, heterocyclyl, alkoxy, phenoxy, benzyloxy, cyclohexyloxy, COR4 (R4 = R1); R3 = R1, XCOPOR1R2 (X = alkylene, cycloalkylene, phenylene, biphenylene); R4 = R7 or R3-R4 forming alkylene, vinylene, o-phenylene; R1-R2 may form ring including the P atom. The groups in II are as follows: R6, R7 = H, alkyl, Ph, alkoxy, phenoxy, alkythio, phenylthio, dialkylamine, piperidino, morpholino, halogen; R8, R9 = alkyl, alkenyl, phenylalkyl, cycloalkyl; R8-R8 together may form alkylene. In III the

groups are as follow: R11, R12, R13 = H, alkyl, alkoxy, alkylthio, halogen, alkoxycarbonyl. The photoinitiator mixture is suitable for photohardening of white paints.

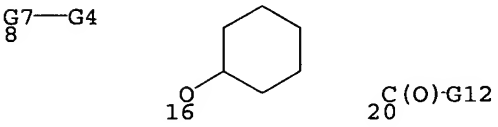
MSTR 1D



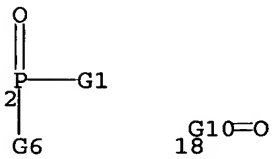
G1 = **alkyl <containing 1-18 C>** /
alkyl <containing 1-4 C> (substd. by 1 or more G2) /
cycloalkyl <containing 5-8 C> /
alkyl <containing 1-3 C> (substd. by 1 or more Ph) / 5 /
naphthyl (opt. substd.) / heterocycle <containing 1 heteroatom, zero or more N, zero or more O, zero or more S (no other heteroatoms), 5- to 6-membered monocyclic ring>



G2 = halo / alkoxy <containing 1-6 C>
G3 = phenylene (opt. substd.)
G4 = H / halo / alkyl <containing 1-12 C> /
alkoxy <containing 1-12 C> / Ph (opt. substd.)
G6 = 8 / naphthyl (opt. substd.) /
heterocycle <containing 1 heteroatom, zero or more N, zero or more O, zero or more S (no other heteroatoms), 5- to 6-membered monocyclic ring> /
alkoxy <containing 1-18 C> / OPh (opt. substd.) / OCH2Ph /
16 / alkylcarbonyl <containing 1-18 C> /
alkylcarbonyl <containing 1-4 C> (substd. by 1 or more G11) /
20 / alkylcarbonyl <containing 1-3 C>
(substd. by 1 or more Ph)



G7 = phenylene (opt. substd.)
G9 = **2** / 18



G10 = heterocycle <containing 1 or more heteroatoms, 1 or more P, attached through 1 or more P, 2 or more single bonds>
G11 = halo / alkoxy <containing 1-4 C>

G12 = cycloalkyl <containing 5-8 C> / **22** /
naphthyl (opt. substd.) / heterocycle <containing 1
heteroatom, zero or more N, zero or more O,
zero or more S (no other heteroatoms),
5- to 6-membered monocyclic ring>

G13—G4
22

G13 = **phenylene (opt. substd.)**
G14 = alkyl <containing 2-8 C> / **cyclohexylene** /
phenylene (opt. substd.) / 27-3 28-25

G15—G16
27 28

G15 = phenylene (opt. substd.)
G16 = phenylene (opt. substd.)
Patent location: claim 1

WPI structure search (post-1999)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                  ANSWERS '5-6' FROM FILE MARPAT

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